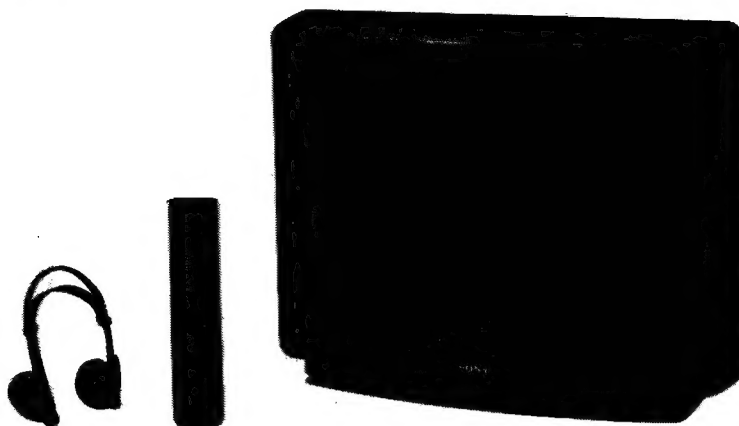


KV-32XBR26 / 32XBR36

RM-Y112A

TDR-IF310/RM-Y113A

SERVICE MANUAL



US Model

KV-32XBR26

Chassis No. SCC-F16L-A

KV-32XBR36

Chassis No. SCC-F16J-A

Canadian Model

KV-32XBR26

Chassis No. SCC-F17L-A

KV-32XBR36

Chassis No. SCC-F17J-A

FN CHASSIS

MODELS OF THE SAME SERIES

KV-32XBR26/32XBR36	
KV-27XBR35/32XBR35	
KV-27XBR26/27XBR36	

SPECIFICATIONS

Television system : American TV standards
Channel coverage : VHF: 2-13
UHF: 14-69
CABLE TV: 1-125
Picture tube : Microblack™ Trinitron® tube
32-inch picture measured diagonally
34-inch picture tube measured diagonally
Antenna : 75-ohms external antenna
terminal for VHF/UHF
Input jacks : VIDEO IN 1, 2 and 3
S VIDEO IN (4-pin mini DIN)
Y: 1 Vp-p, 75-ohms unbalanced,
sync negative
C: 0.286 Vp-p (Burst signal)
75-ohms
Video (phono jacks): 1 Vp-p, 75-ohms
unbalanced, sync negative
Audio (phono jacks):
500 mVrms (100% modulation)
Impedance: 47 kilo-ohms

Output jacks

MONITOR OUT

S VIDEO MONITOR OUT
(4-pin mini DIN)

Y: 1 Vp-p, 75-ohms
unbalanced, sync negative

Video (phono jacks): 1 Vp-p, 75-ohms
unbalanced, sync negative

Audio (phono jacks): 500 mVrms
(100% modulation)

Impedance: 10 kilo-ohms

AUDIO OUTPUT (VARIABLE)

(phono jacks)

More than 900 mVrms (100%
modulation) at the maximum volume
setting (variable)

Impedance: 5 kilo-ohms

AUDIO LINE OUT

(phono jacks)

900 mVrms (100% modulation)

Impedance: 5 kilo-ohms

- Continued on next page -



TRINITRON® COLOR TV
SONY®

Speaker output	13W×2 (8 ohms)
Speaker size	Tweeter 25 mm (1 in.)×2 units Woofer 100 mm (4 in.)×2 units
Audio frequency response	Tweeter 8 kHz-20 kHz Woofer 50 Hz-8 kHz
Power requirements	120 V AC, 60 Hz
Power consumption	225W
Dimensions (w/h/d)	Approx. 870×663×575.2 mm (W/H/D) (34 ³ / ₈ ×26 ¹ / ₈ ×22 ³ / ₄ inches)
Weight	(KV-32XBR26) Approx. 76.8kg (169 lb 5 oz) (KV-32XBR36) Approx. 77.3kg (170 lb 7 oz)
Supplied accessories	(KV-32XBR26) Remote Commander RM-Y112A (1) with 2 size AA (R6) EVEREADY batteries (KV-32XBR36) Remote Commander RM-Y113A (1) with 2 size AA (R6) EVEREADY batteries Cordless headphones TDR-IF310 (1) with 2 size AA (R6) EVEREADY batteries
Optional accessories	U/V mixer EAC-66 Connecting cable RK-74A VMC-810S/820S YC-15V/30V

Design and specifications are subject to change without notice.

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE Δ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

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SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

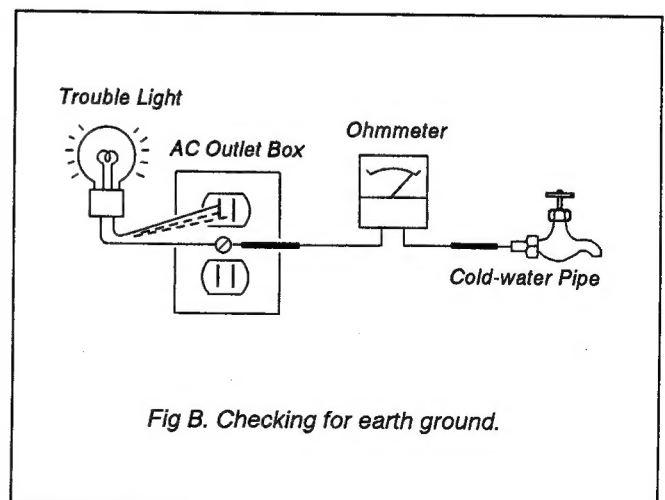
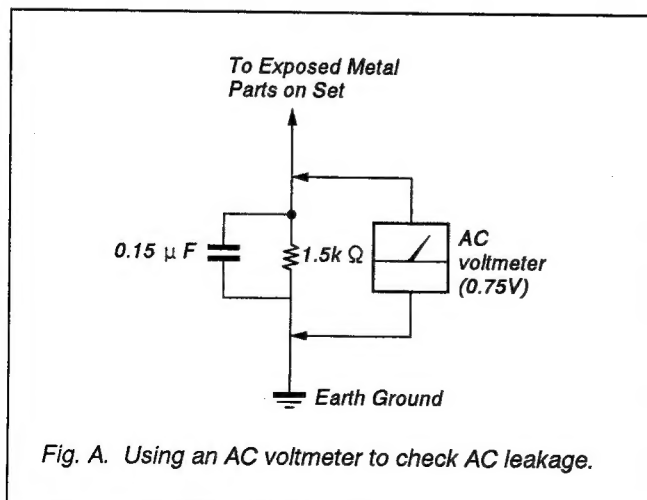
LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



Locating Controls and Connectors

For details, see the pages indicated by the numbered black circles ●.

Front

POWER switch*
TIMER/STAND BY Indicator ① ②
STEREO indicator ③

Remote control detector ④

CHANNEL +/- buttons* ⑤ ⑥ ⑦ ⑧ ⑨

VOLUME +/- buttons* ⑩ ⑪ ⑫

VOLUME button* ⑬

DEMO button* ⑭

VIDEO IN 3 ⑮

VIDEO IN 3 jacks (video, audio L/R) ⑯ ⑰

DEMO (demonstration) button ⑱

TV/VIDEO button* ⑲

TV/VIDEO button* ⑳

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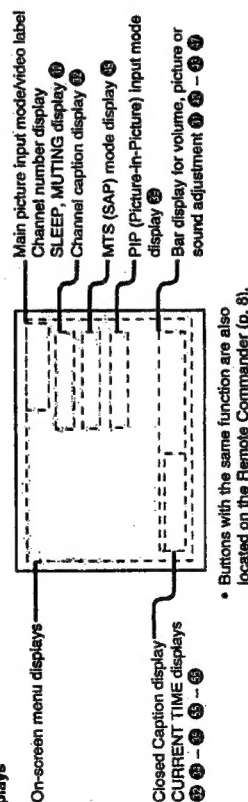
TV/VIDEO button* 226

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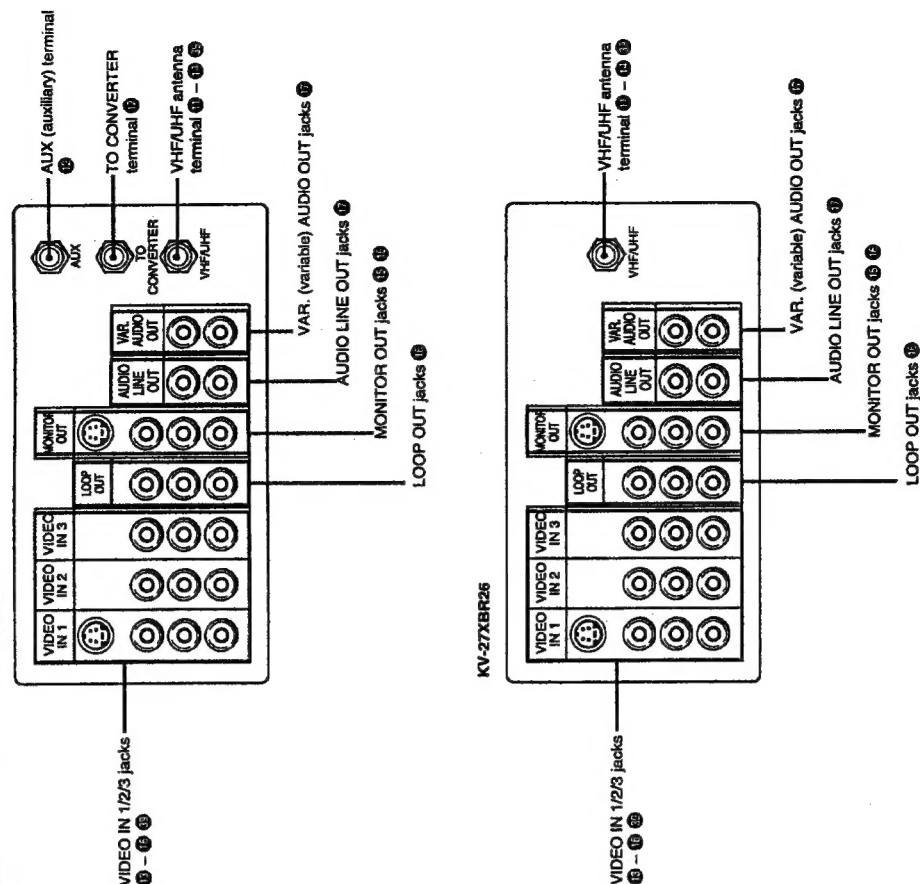
TV

Screen Displays



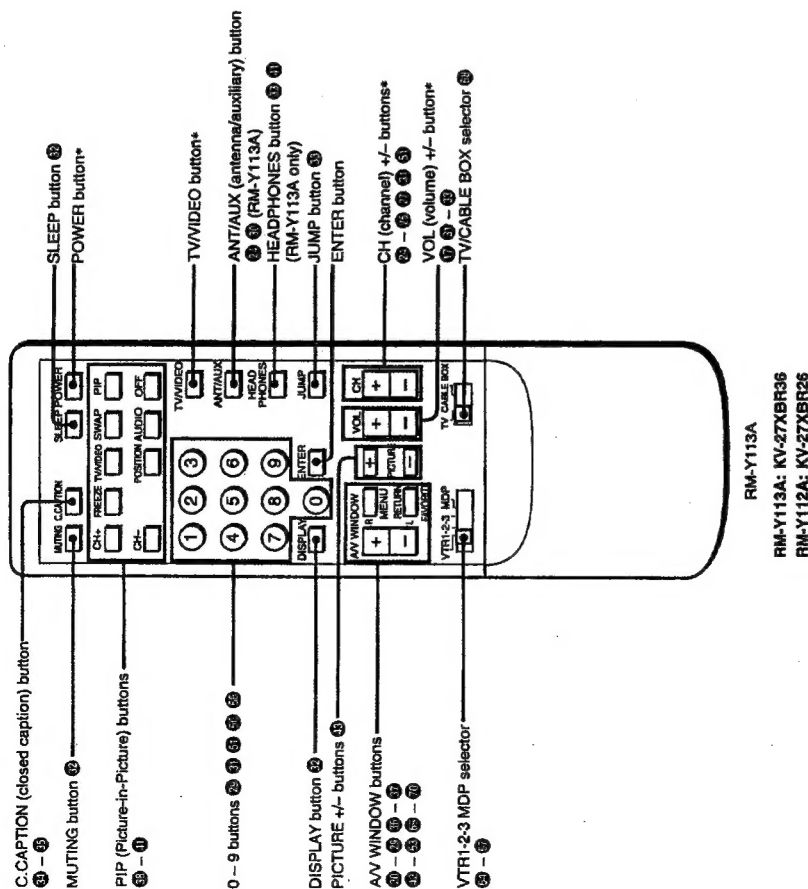
- Buttons with the same function are also located on the Remote Commander (p. 8).

KV-27XBR36



Locating Controls and Connectors

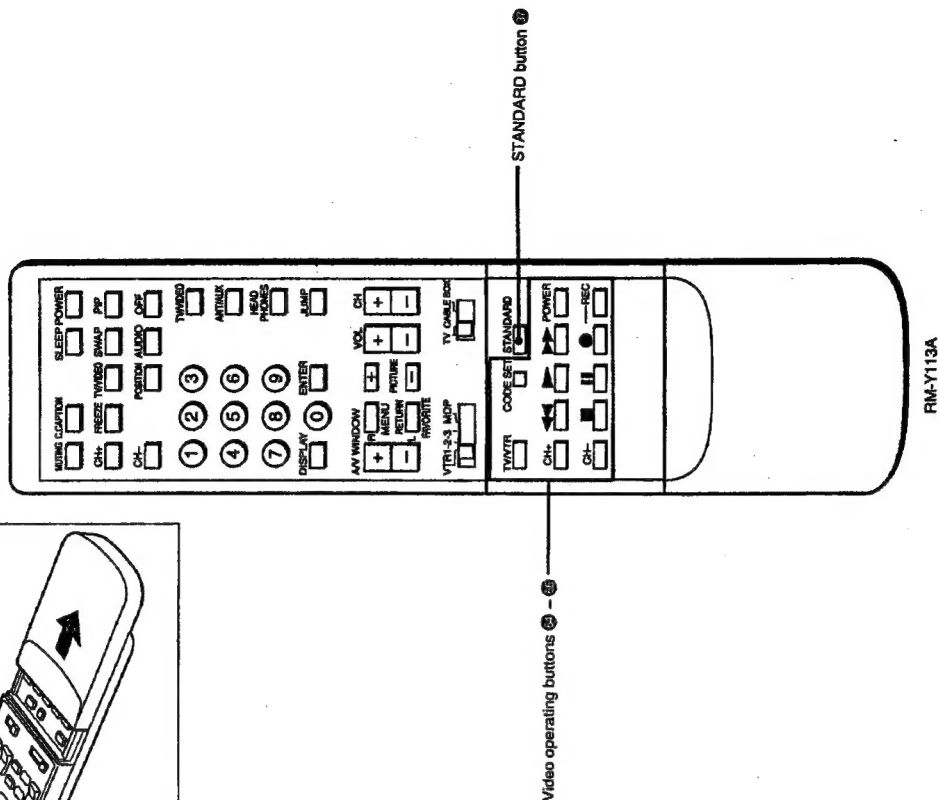
Remote Commander (with the video control cover closed)



* Buttons with the same function are also located on the TV (p. 6).

Note
If the TV/CABLE BOX selector is set to CABLE BOX, the Remote Commander is able to control a connected cable box, not the TV (p. 68). Set the selector to TV to control the TV with the Remote Commander.

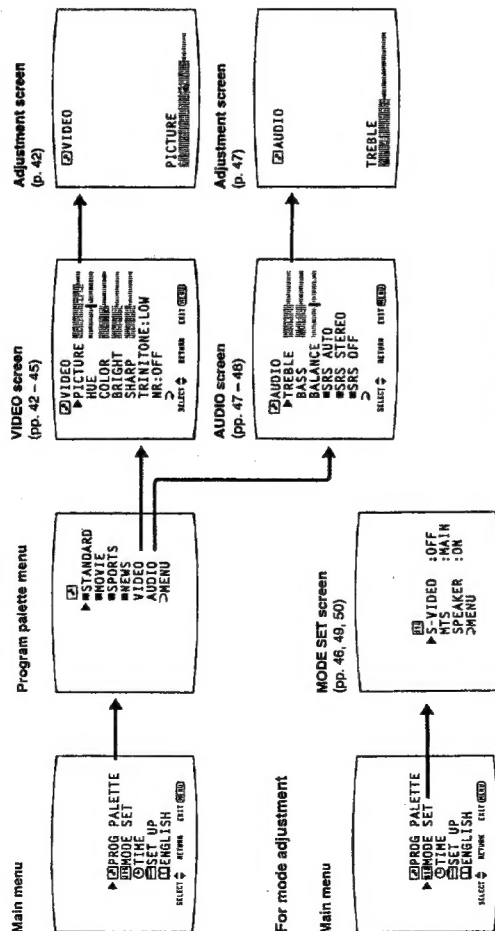
Remote Commander (with the video control cover open)



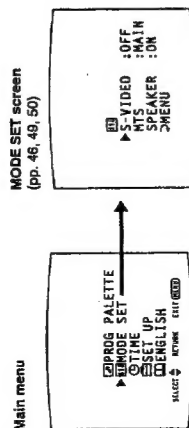
Using the On-Screen Menus

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

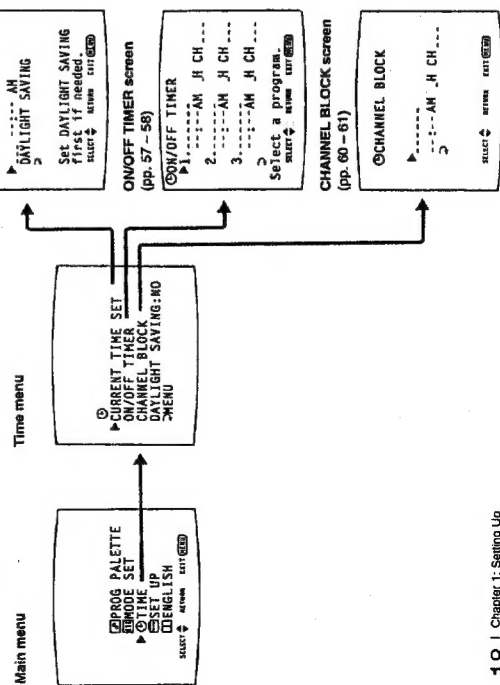
For picture and sound quality adjustment



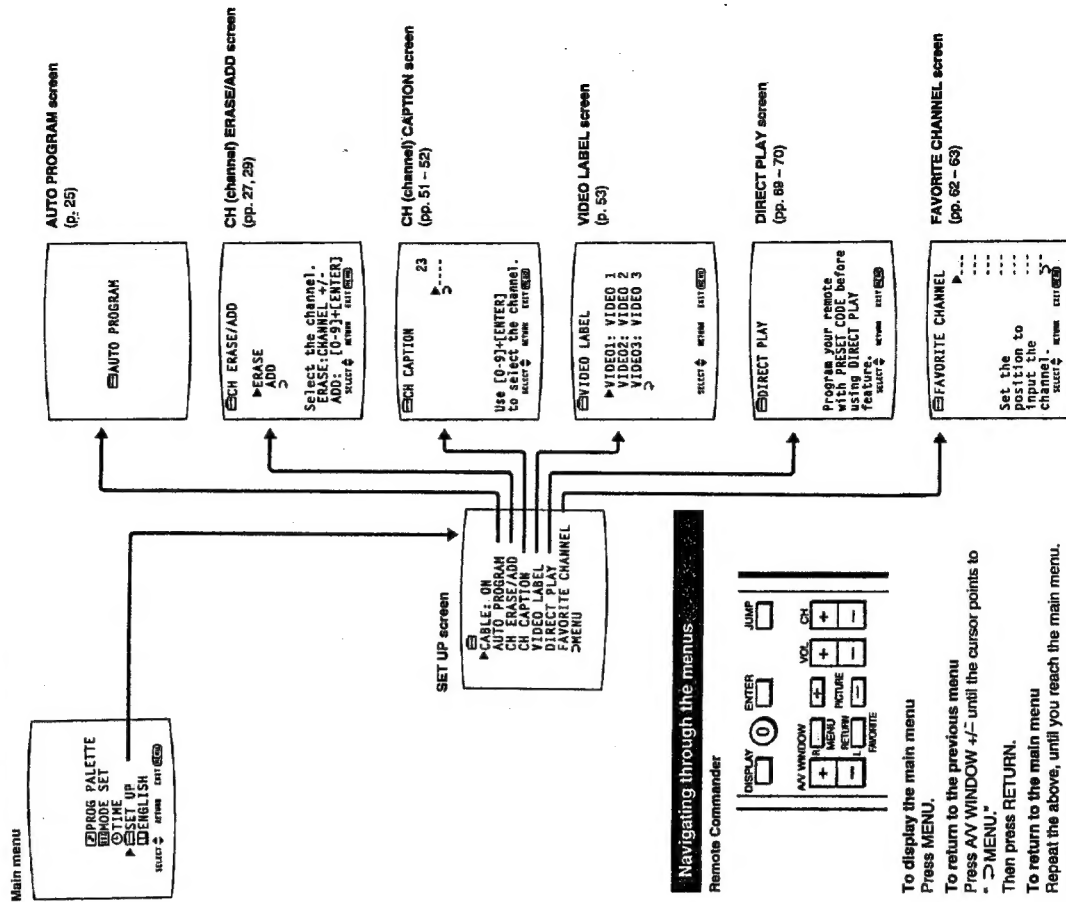
For mode adjustment



For time-related settings

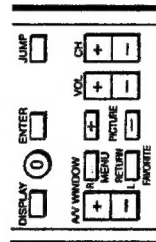


For presetting and other functions



Navigating through the menus

Remote Commander



To display the main menu

Press MENU.

To return to the previous menu

Press ANY WINDOW \leftarrow until the cursor points to

▶ MENU.

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU on the Remote Commander.

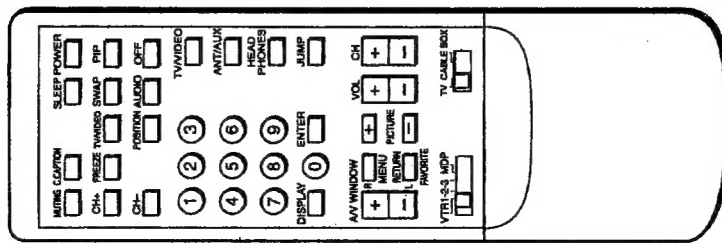
Note

The menus disappear automatically, if you do not press a button within 90 seconds.

Using the On-Screen Menus



Front of TV

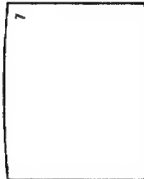


RM-Y113A

Changing the menu language

The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

- 1 Press POWER on the TV or on the Remote Commander to turn on the TV. The TIMER/STAND BY indicator flashes until the picture appears.



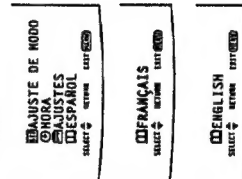
- 2 Press MENU. The main menu appears.



- 3 Press AV WINDOW +/- until the cursor points to "ENGLISH." Then press RETURN. The language display turns red.

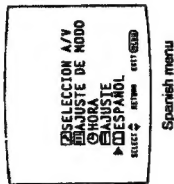


- 4 Press AV WINDOW +/- to select the language. Each time you press AV WINDOW +/-, the "ESPAÑOL," "FRANÇAIS," and "ENGLISH" menus appear.



Note
Certain parts of the "ESPAÑOL" and "FRANÇAIS" menus remain in English.

- 5 Press RETURN. The language is selected.



Spanish menu

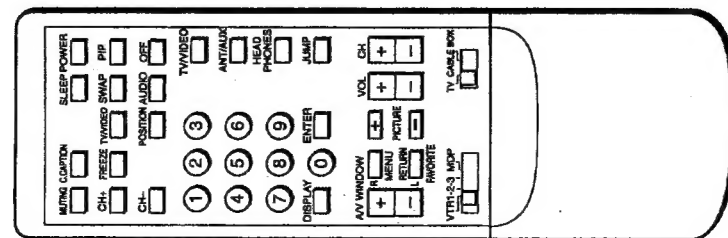
To return to the normal screen
Press MENU on the Remote Commander.

- Notes concerning menus
- During PIP (Picture-in-Picture) mode, the on-screen menus may overlap the window picture.
 - Screen displays (VOLUME, MUTING, CHANNEL, etc.) may overlap the on-screen menus.
 - The menus disappear automatically, if you do not press a button within 90 seconds.

Setting CABLE ON or OFF



Front of TV



RM-Y113A

If you have cable connected to the TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.

Note

If the TV is in video mode, the "CABLE" display is shaded and cannot be selected. Press TV/VIDEO on the TV or on the Remote Commander to change to TV mode.

1 Press MENU.
The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "SET UP".



3 Press RETURN.
The set up menu appears, and the cursor points to "CABLE".



4 Press RETURN again.
The mode display turns red.



5 Press AV WINDOW +/- to select "ON" or "OFF".



6 Press RETURN.
The setting is complete.



To return to the previous menu
Press AV WINDOW +/- until the cursor points to "> MENU".
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV	Corresponding CATV channel
1	A-3
5	A-7
6	A-5
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W-1
38	W-2
39	W-3
...	...
93	W-57
94	W-59
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W-59
101	W-60
102	W-61
...	...
123	W-62
124	W-63
125	W-64

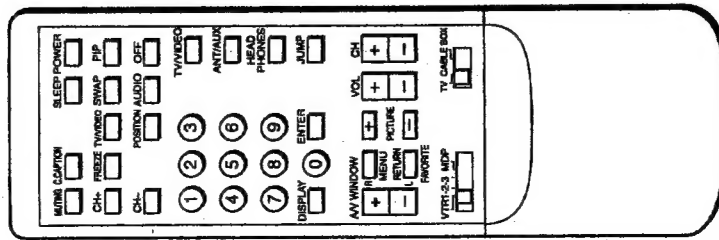
Check with your local cable TV company for more complete information on the available channels.
* The designation of the cable TV channels conforms to the EIA/NTCA recommendation.

Presetting TV Channels

By presetting TV channels to the TV, you can select channels by pressing CHANNEL +/- on the TV or CH +/- on the Remote Commander.



FRONT OF TV



RM-Y113A

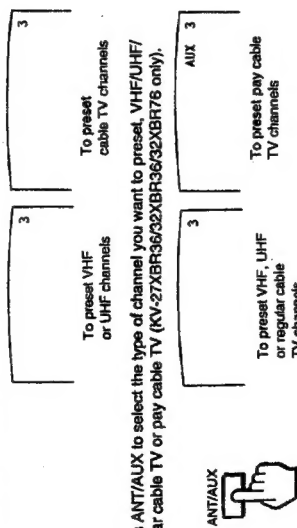
Presetting all receivable channels automatically

Follow these instructions to preset all the receivable VHF, UHF or cable TV channels to the TV.

Notes

- If the TV is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO on the TV or on the Remote Commander to change to TV mode.
- Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

1 Set the cable connection on or off (pp. 22 - 23) to select the type of channel you want to preset, VHF/UHF or cable TV.



2 Press MENU.

The main menu appears.



3 Press AV WINDOW +/- until the cursor points to "SET UP."



Receivable channels for this TV
VHF: 2 - 13
UHF: 14 - 69
Cable: 1 - 125

To select TV channels without presetting
Press the 0 - 9 buttons and ENTER.

To return to the previous menu
Press A/V WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

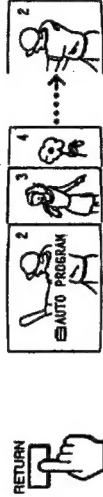
4 Press RETURN.
The set up menu appears.



5 Press A/V WINDOW +/- until the cursor points to "AUTO PROGRAM."

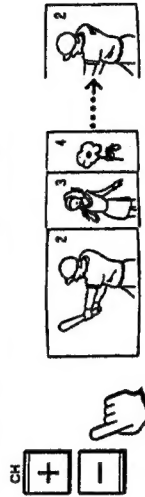


6 Press RETURN.



"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory.
When no more channels are found, auto programming stops and the screen returns automatically to the set up menu.

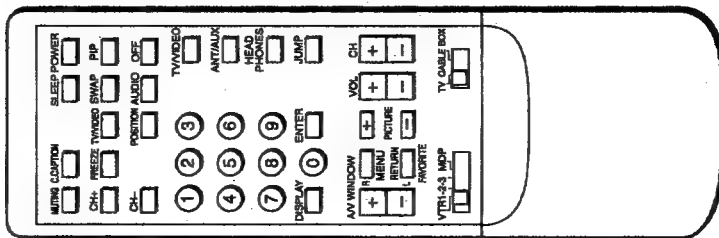
7 Press CH +/- to check or view the preset channels.



Presetting TV Channels



Front of TV



RIM-Y113A

Erasing TV channels

Follow these instructions to erase unnecessary TV channels, so that when you press CH +/-, the channel(s) are skipped.

- 1 Press MENU.
The main menu appears.



- 2 Press AV WINDOW +/- until the cursor points to "SET UP."



- 3 Press RETURN.
The set up menu appears.



- 4 Press AV WINDOW +/- until the cursor points to "CH ERASE/ADD."

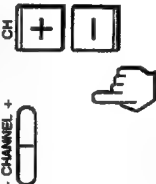


- 5 Press RETURN.
The CH ERASE/ADD screen appears, and the cursor points to "ERASE."



Select the channel.
ERASE: CHANNEL +/-
ADD: [0-9]+[ENTER]

- 6 Press CHANNEL +/- on the TV or CH +/- on the Remote Commander to select the channel you want to erase.
The channel display appears.



Select the channel.
ERASE: CHANNEL +/-
ADD: [0-9]+[ENTER]

- 7 Press RETURN.
A "-" sign appears in front of the channel number display, indicating that the channel is erased; then the CH ERASE/ADD screen automatically reappears.



Select the channel.
ERASE: CHANNEL +/-
ADD: [0-9]+[ENTER]

To erase another channel
Repeat steps 6 - 7.

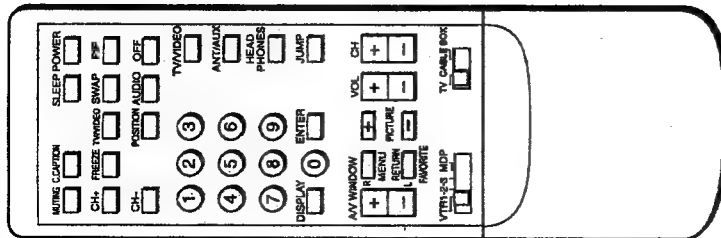
To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Note

If you erase a VHF or UHF channel, the same number cable TV channel is also erased (and vice versa).



RM-Y113A

Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory, or to replace a TV channel you previously erased (pp. 26 - 27).

1 Press MENU
The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "SET UP."



3 Press RETURN.
The set up menu appears.



4 Press AV WINDOW +/- until the cursor points to "CH ERASE/ADD."



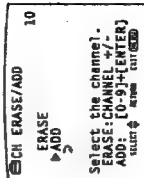
5 Press RETURN.
The CH ERASE/ADD screen appears.



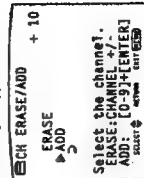
6 Press AV WINDOW +/- until the cursor points to "ADD."



7 Press 0 - 9 and ENTER on the Remote Commander to select the channel you want to add.
The channel display appears.



8 Press RETURN.
A "+" sign appears in front of the channel number display, indicating that the channel is added; then the CH ERASE/ADD screen automatically reappears.



To add another channel
Repeat steps 7 - 8.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU." Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Note
If you add a VHF or UHF channel, the same number cable TV channel is also added (and vice versa).

Chapter 2: Using Basic Features Watching TV Programs



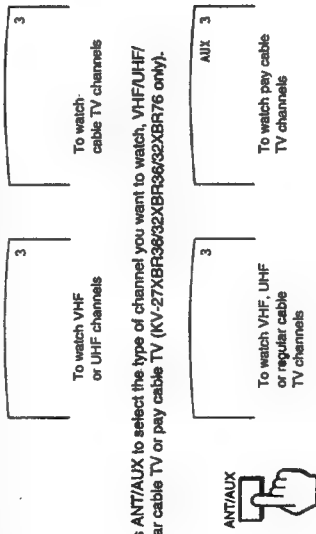
Front of TV

Make sure that the TV/CABLE BOX selector on the Remote Commander is set to TV, in order to control the TV with the Remote Commander.

- 1 Press POWER on the TV or on the Remote Commander to turn on the TV.
The **TIMER/STAND BY** indicator flashes until the picture appears.



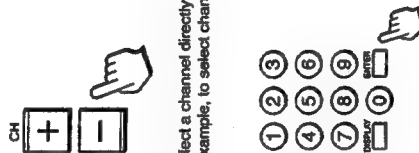
- 2 Set the cable connection on or off (pp. 22 - 23) to select the type of channel you want to watch, VHF/UHF or cable TV.



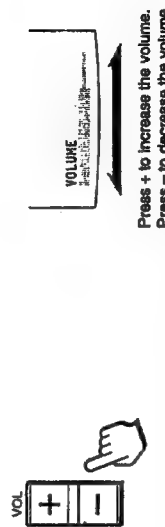
Press ANT/AUX to select the type of channel you want to watch, VHF/UHF/regular cable TV or pay cable TV (KV-27XBR36/32XBR76 only).

- 3 Selected a channel in one of the following two ways:

To scan the preset channels in numerical sequence, press CH +/-. To select a channel directly, press 0 - 9 and then ENTER. For example, to select channel 10, press 1, 0 and ENTER.



- 4 Press VOL +/- to adjust the volume.

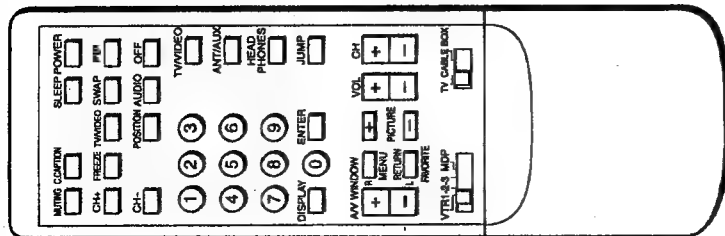


If VIDEO 1, VIDEO 2 or VIDEO 3 appears on the screen Press TV/VIDEO on the TV or on the Remote Commander until a TV channel number appears.

To select channels more easily Set FAVORITE CHANNEL (pp. 62 - 63).

To turn off the TV Press POWER on the TV or on the Remote Commander.

Using Convenient Features



Muting the sound — MUTING

Press **MUTING**.
"MUTING" appears on the screen.

To restore the sound
Press **MUTING** again, or press **VOL +**.



Keeping the displays on-screen — DISPLAY

Press **DISPLAY**.
All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode, and the current time ("AM" or "PM" disappears after about three seconds).

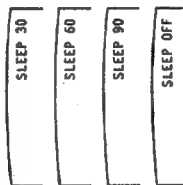
To turn off the displays
Press **DISPLAY** again.



Setting the sleep timer — SLEEP

The sleep timer turns off the TV automatically after the amount of time you select.

Press **SLEEP**.
Each time you press **SLEEP**, the time increments "30," "90," "90" and "OFF" mode appear in sequence.



A red "SLEEP" display appears about one minute before the TV goes off.

To cancel the setting.
Press **SLEEP** until OFF mode appears.
A green "SLEEP OFF" display appears for about three seconds.

OR
Turn the TV off.
The sleep timer setting is cancelled.



Front of TV

Switching quickly between two channels — JUMP

Use this function to keep track of two programs alternately.

To recall the channel you were watching previously
Press **JUMP**.

To switch back to the first channel
Press **JUMP** again.



Using the cordless headphones — HEADPHONES

(KV-27XBR36/32XBR36 only)
Turning on the headphones does not affect the sound from the TV speakers. If you want to listen to the sound from the headphones only, turn off the TV speaker sound by pressing **VOLUME** — on the TV or **VOL** — on the Remote Commander.

To turn on the headphones
Press **HEADPHONES**.

The  display appears for about three seconds.

To control the headphones volume/
To turn the headphones power on or off
Use the controls on the headphones.



To turn off the headphones
Press the headphones power button first, then press **HEADPHONES**.

To use the headphones to listen to sound from a window picture (PIP function)
See "Selecting the headphones audio source" (p. 41).

Notes

- When using the headphones, you cannot adjust sound quality or select sound modes (pp. 47–49) or use the muting feature (p. 32).
- After using the headphones, if you press **HEADPHONES** without pressing the headphones power button first, you may hear noise. This does not indicate a malfunction.
- To prevent hearing damage due to sudden or prolonged excessive volume, do not raise the headphones volume too high, while listening.

Previewing the features — DEMO

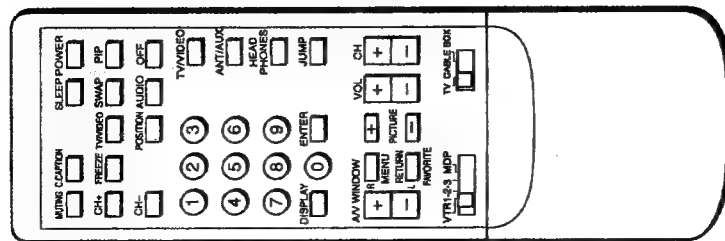
Press **DEMO**.
Functions and menus are displayed one by one.

To restart **DEMO** from the beginning
Press **DEMO** again.

To stop **DEMO**
Press any button.

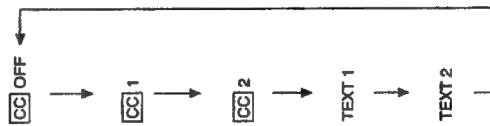
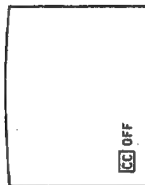


Using Closed Caption



RM-Y113A

- 1 Press C.CAPTION.
The closed caption mode appears. CC1, CC2, TEXT1, TEXT2 or CC OFF appears in sequence each time you press C.CAPTION.



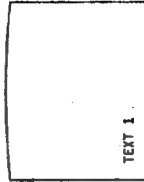
- 2 Press C.CAPTION repeatedly.



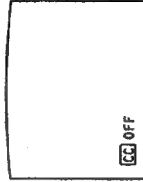
Select CC1 or CC2 to view Captions.
A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)



Select TEXT1 or TEXT2 to view Text.
Text is information that is presented using the half to full television screen. It is usually not related to the program.



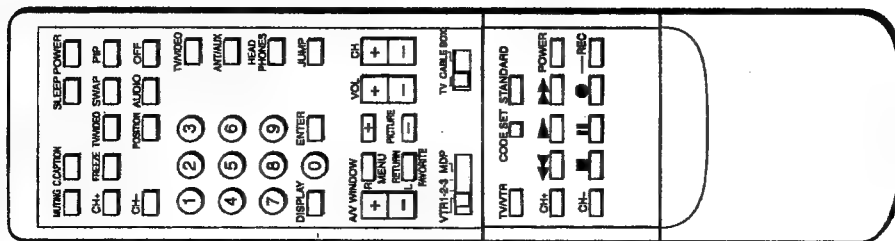
Select CC OFF if you don't want to view Closed Caption nor Text.



Selecting a Picture and Sound Mode

This TV features four modes (STANDARD, MOVIE, SPORTS, NEWS) that offer different picture and sound qualities. Choose the one that best suits the type of program that you want to watch.

Example: Select MOVIE mode for picture and sound that gives you the sense of being in a movie theater.

PM-Y113
(with video control
cover open)

- 1** Press MENU. The main menu appears, and the cursor points to "PROG PALETTE."
-
- 2** Press RETURN. The program palette menu appears.
-
- 3** Press AV WINDOW +/- until the cursor points to "MOVIE."
-
-
- 4** Press RETURN. The "MOVIE" display turns green, indicating that MOVIE mode is selected.
-

To select a different mode
Repeat steps 3 – 4.

Selecting standard mode (without using the menus)

Follow these instructions to select standard mode without using the on-screen menus.

Press STANDARD.



When you select STANDARD mode

You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the TV", pp. 42 - 50) are cancelled and the original factory settings are restored.

When you select MOVIE mode

You receive a finely detailed picture, and a theatrical audio effect. To further adjust picture and sound qualities, follow the instructions on pp. 42 - 50.

When you select SPORTS mode

You receive a vivid, bright picture, and sound with a sports stadium effect. To further adjust picture and sound qualities, follow the instructions on pp. 42 - 50.

When you select NEWS mode

Picture noise is reduced, and you receive clear voice reproduction. To further adjust picture and sound qualities, follow the instructions on pp. 42 - 50.

To return to the previous menu
Press **AV WINDOW +/-** until the cursor points to "**↵ MENU**."
Then press **RETURN**.

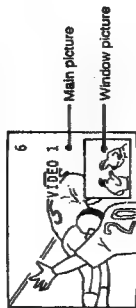
To return to the main menu
Repeat the above, until you reach the main menu.

**To return to the normal screen
Press MENU on the Remote Commander.**

Chapter 3: Using Advanced Features Watching Two Pictures at Once (PIP)

You can watch both the main picture and a window picture simultaneously, using the Picture-in-Picture (PIP) function. Models KV-27XR36 are equipped with two-tuner PIP, allowing you to watch two TV channels at once.

Models KV-27XR26 are equipped with one-tuner PIP. To watch two TV channels, you must first connect a VCR to the TV, to watch a second TV channel through the VCR tuner. (See "Connecting Other Equipment," pp. 13 - 14.)



Picture-in-Picture special features

When watching the main picture and a window picture, you can:

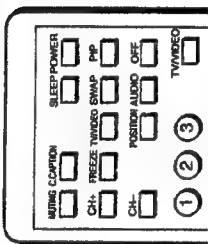
- Swap the main and window pictures (SWAP).
- Change the position of the window picture (POSITION).
- Display a still picture (FREEZE).
- Choose the sound from the main or window picture (AUDIO).
- Listen to the window picture sound through the supplied cordless headphones (HEADPHONES). (KV-27XR36)

Notes

- The window picture sound is also output from the VAR. AUDIO OUT jacks. The AUDIO LINE OUT and MONITOR OUT jacks output the main picture sound only.
- The video label and channel caption will not appear with the window picture even if you have set them.
- If you select a blocked channel in the window picture, the display "BLOCKED" appears with the window picture. (See "Setting CHANNEL BLOCK," pp. 60 - 61.)

Displaying a window picture

Remote Commander



Press PIP to display a window picture
Input source mode or TV channel
for the main picture



Input source mode or TV channel
for the window picture



A window picture appears in the last mode you watched.
Each time you press PIP, a 1/8 or 1/16 size window picture appears alternately.

To turn PIP function off

Press OFF.
The window picture disappears.

To receive the window picture sound

Press AUDIO.

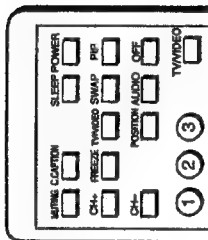
The β display appears for a few seconds, indicating that the window picture sound is being received.

To restore the main picture sound

Press AUDIO again.

Changing the window picture input mode

Remote Commander



1 Press PIP to display a window picture.



2 Press TVVIDEO in the Picture-in-Picture control area to select the input mode.
Each time you press TVVIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.

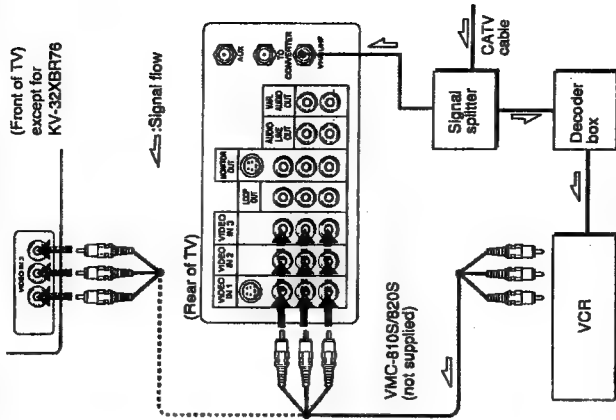


To change TV channels in the window picture

Press CH +/- in the PIP control area.

Displaying CATV input as a window picture

To use Picture-in-Picture with pay cable TV input, make the connections to your cable converter box as shown below.



After making the above connections, turn the cable connection on by following the steps on pp. 22 - 23; then continue with the steps below.

1-2

Follow steps 1 - 2 in "Changing the window picture input mode" on this page to select the video input mode for your connected VCR.

3

Put your VCR on an inactive channel (channel 3 or 4).

4

Change pay cable TV channels with the decoder box.

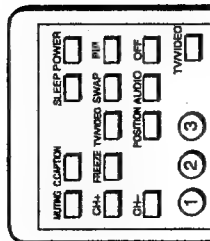
To control your cable converter box with the supplied Remote Commander
See p. 68.

Watching Two Pictures at Once (PIP)

Changing the position of the window picture

Follow these instructions to change the position of the window picture on the screen.

Remote Commander



Press PIP to display a window picture.



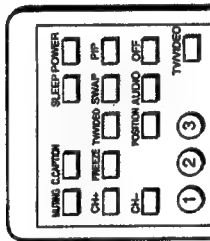
2 Press POSITION.
Each time you press POSITION, the window picture moves as illustrated.



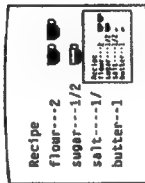
Displaying a still picture

Use the FREEZE function to display a still picture. This function is useful when you want to write down a recipe from a cooking program, a displayed address or phone number and so on.

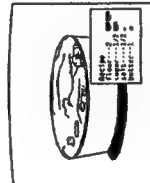
Remote Commander



Press PIP to display a window picture.



2 Press FREEZE.
The window picture image remains still on the screen.

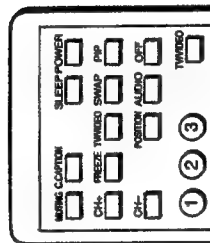


To restore the normal picture
Press FREEZE again.

Swapping the main and window pictures

Follow these instructions to swap the input signals of the main and window pictures.

Remote Commander



1 Press PIP to display a window picture.



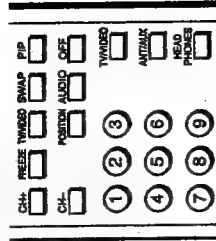
2 Press SWAP.
Each time you press SWAP, the images from the main and window pictures switch places.



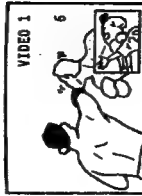
Selecting the headphones audio source (KV-27XBR36/32XBR36 only)

Follow these instructions to select the audio source that you want to receive through the supplied cordless headphones (main or window picture). If you want to listen to sound from the window picture, make sure that the sound from the window picture is being received (p. 38).

Remote Commander (RM-Y113A)



Press PIP to display a window picture.



2 Press HEADPHONES.
Each time you press HEADPHONES, the audio source changes to main picture, window picture and "OFF" in sequence.
The  display appears with the input mode.

Notes

- If you turn PIP function off, the sound from the cordless headphones changes to the main picture sound.
- If you turn off the TV, the next time you turn on the TV the headphones are off.

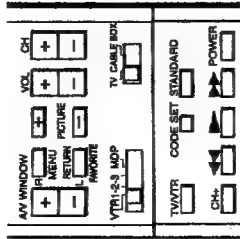
Adjusting the TV

You can adjust the picture and sound for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the TV or on the Remote Commander to select the input mode, before making the adjustments. These adjustments are retained in memory even when you turn off the TV, but are cancelled after you change the adjustments, or select a picture and sound mode (pp. 36 - 37).

Adjusting the picture

Follow these instructions to adjust PICTURE, HUE, COLOR, BRIGHT (brightness) and SHARP (sharpness).

Remote Commander (with video control cover open)



1 Press MENU.

The main menu appears, and the cursor points to "PROGRAM PALETTE."



2 Press RETURN.

The program palette menu appears.



3 Press AV WINDOW +/- until the cursor points to "VIDEO."

4 Press RETURN.

The VIDEO screen appears.



5 Press AV WINDOW +/- until the cursor points to the item you want to adjust.

6 Press RETURN.

The adjustment screen appears.



7 Press AV WINDOW +/- to make the adjustment.

Picture quality	Press AV WINDOW -	Press AV WINDOW +
PICTURE	For decreased picture contrast with soft color	For increased picture with vivid color
HUE	Skin tones become purplish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
BRIGHT	For less brightness	For more brightness
SHARP	For less sharpness	For more sharpness

8 Press RETURN.

The adjustment is complete, and the VIDEO screen automatically reappears.



To adjust other items

Repeat steps 5 - 8.

To restore the factory settings for all the items

Select "STANDARD" on the program palette menu, and press RETURN.

or, press STANDARD on the Remote Commander.

All the items, including TRINITONE (p. 44) and NR (p. 45) return to their original factory settings.

To adjust picture contrast

You can also adjust picture contrast with the PICTURE +/- buttons on the Remote Commander.



Press + to increase picture contrast with vivid color.

Press - to decrease picture contrast with soft color.

The picture adjustment screen appears.

To return to the previous menu

Press AV WINDOW +/- until the cursor points to "MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

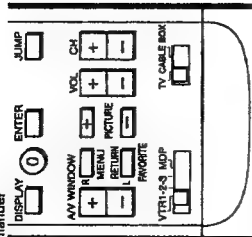
Press MENU on the Remote Commander.

Adjusting the TV

Setting the TRINITONE mode

Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. Use the Sony Trinitone feature to adjust the picture color to your preference.

Remote Commander



- 1** Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."



- 2** Press RETURN.
The program palette menu appears.



- 3** Press AV WINDOW +/- until the cursor points to "VIDEO."

- 4** Press RETURN.
The VIDEO screen appears.



- 5** Press AV WINDOW +/- until the cursor points to "TRINITONE."

- 6** Press RETURN.
The mode display turns red.

- 7** Press AV WINDOW +/- to select "HIGH" or "LOW."
Select "HIGH" to make the picture cool (bluish).
Select "LOW" to make the picture warm (reddish).

- 8** Press RETURN.
The setting is complete.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

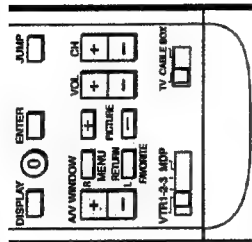
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Setting NR (picture noise reduction) ON or OFF

Follow these instructions to reduce picture noise.

Remote Commander



- 1** Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."



- 2** Press RETURN.
The program palette menu appears.



- 3** Press AV WINDOW +/- until the cursor points to "VIDEO."

- 4** Press RETURN.
The VIDEO screen appears.



- 5** Press AV WINDOW +/- until the cursor points to "NR."



- 6** Press RETURN.
The mode display turns red.

- 7** Press AV WINDOW +/- to select "ON" or "OFF."
Select "ON" to reduce picture noise.
Select "OFF" to restore the normal picture.

- 8** Press RETURN.
The setting is complete.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Adjusting the TV

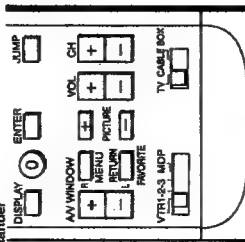
Setting S-VIDEO ON or OFF

Follow these instructions to set S-VIDEO on or off, depending on the kind of video equipment you have connected to the TV. For instructions on connecting video equipment, see pp. 13 - 16.

Note

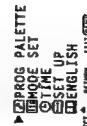
If the TV is in TV, VIDEO 2 or VIDEO 3 mode, the "S-VIDEO" display is shaded and cannot be selected. Press TV/VIDEO on the TV or on the Remote Commander to change to VIDEO 1 mode.

Remote Commander



1 Press MENU.

The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "MODE SET."

3 Press RETURN.

The mode set menu appears, with the cursor pointing to "S-VIDEO."



4 Press RETURN.

The mode display turns red.

5 Press AV WINDOW +/- to select "ON" or "OFF."

6 Press RETURN.

The setting is complete.

To return to the previous menu

Press AV WINDOW +/- until the cursor points to "S-VIDEO." Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

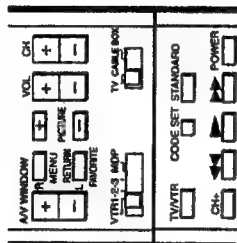
To return to the normal screen

Press MENU on the Remote Commander.

Adjusting the sound

Follow these instructions to adjust the TREBLE, BASS and BALANCE.

Remote Commander (with video control cover open)



1 Press MENU.

The main menu appears, and the cursor points to "PROGRAM PALETTE."



2 Press RETURN.

The program palette menu appears.



3 Press AV WINDOW +/- until the cursor points to "AUDIO."

4 Press RETURN.

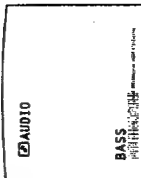
The AUDIO screen appears.



5 Press AV WINDOW +/- until the cursor points to the item you want to adjust.

6 Press RETURN.

The adjustment screen appears.



7 Press AV WINDOW +/- to make the adjustment.

Sound quality	Press AV WINDOW -	Press AV WINDOW +
TREBLE	To decrease the treble response	To increase the treble response
BASS	To decrease the bass response	To increase the bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

8 Press RETURN.

The adjustment is complete, and the AUDIO screen automatically reappears.



To adjust other items
Repeat steps 5 - 9.

To restore the factory settings for all the items
Select "STANDARD" on the program palette menu, and press RETURN; or, press STANDARD on the Remote Commander.

All the items, including SRS mode (p. 48) return to their original factory settings.

To return to the previous menu

Press AV WINDOW +/- until the cursor points to "S-VIDEO." Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU on the Remote Commander.

Adjusting the TV

Selecting an SRS (Sound Retrieval System) mode

For lifelike sound reproduction, follow the instructions below to select the SRS mode you prefer.

In SRS AUTO mode, SRS functions in both monaural and stereo modes.

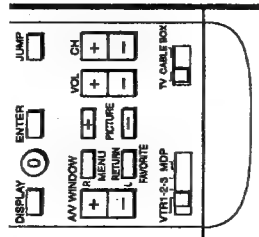
Monaural sound programs will have a 'simulated stereo' effect.

In SRS STEREO mode, SRS functions only when a stereo program is received.

The STEREO indicator on the TV lights up whenever a stereo broadcast is received.

Select SRS OFF mode to return to normal sound mode.

Remote Commander



3 Press AV WINDOW +/- until the cursor points to "AUDIO."

4 Press RETURN.
The AUDIO screen appears.



5 Press AV WINDOW +/- until the cursor points to the SRS mode you want.

6 Press RETURN.
The mode is selected.

1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."



2 Press RETURN.
The program palette menu appears.



Selecting an MTS (Multichannel TV Sound) mode

Follow these instructions to select an MTS mode.

Select MAIN mode to listen to stereo sound.
The STEREO indicator on the TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

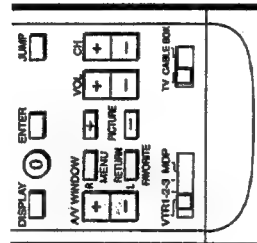
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

Note

If the TV is in video mode, the "MTS" display is shaded and cannot be selected.

Press TV/VIDEO on the TV or on the Remote Commander to change to TV mode.

Remote Commander

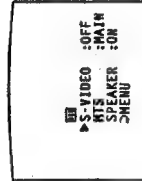


1 Press MENU.
The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "MODE SET."

3 Press RETURN.
The mode set menu appears.

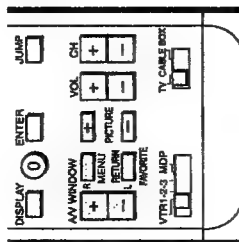


Adjusting the TV

Setting SPEAKER ON or OFF

Follow these instructions to turn the TV speakers off when you connect an audio system (p.17), and on when you want to listen to the sound from the TV speakers.

Remote Commander

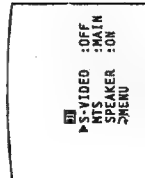


1 Press MENU.
The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "MODE SET."
"MODE SET."

3 Press RETURN.
The mode set menu appears.



4 Press AV WINDOW +/- until the cursor points to "SPEAKER."

5 Press RETURN.
The mode display turns red.

6 Press AV WINDOW +/- to select "ON" or "OFF."

7 Press RETURN.
The setting is complete.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

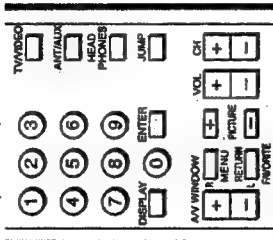
Customizing the Screen Display

Setting channel captions — CH CAPTION

Follow these instructions to caption each channel number display with a name, for instance, the television station call letters. (You can set up to four letters or numbers).

Example: Caption channel 15 as "NBC."

Remote Commander (RM-Y113A)



1 Press MENU.
The main menu appears.



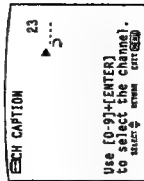
2 Press AV WINDOW +/- until the cursor points to "SET UP."

3 Press RETURN.
The set up menu appears.

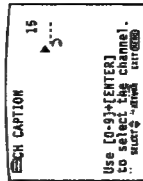


4 Press AV WINDOW +/- until the cursor points to "CH CAPTION."

5 Press RETURN.
The CH CAPTION screen appears.

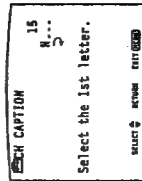


6 Press CH +/-, or press 1, 5 and ENTER to set channel "15."



7 Press RETURN.
The first caption space turns red.

8 Press AV WINDOW +/- to select "N."
Each time you press AV WINDOW +/-, "N" - "9" - "A" - "Z" - "0" - "1" - "2" - "3" - "4" - "5" - "6" - "7" - "8" (blank space) appear in sequence.



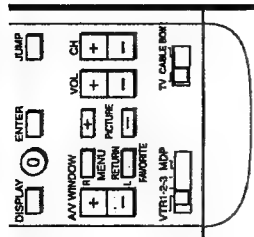
9 Press RETURN.
The second caption space turns red.

(Continued)

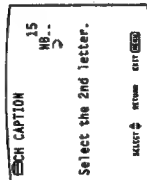
Setting channel captions - CH CAPTION

(Continued from prev. page)

Remote Commander



10 Press AV WINDOW +/- to select "B."

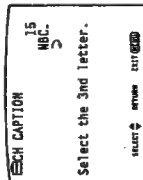


Select the 2nd letter.

11 Press RETURN.

The third caption space turns red.

12 Press AV WINDOW +/- to select "C."

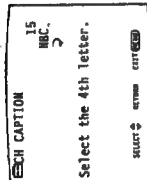


Select the 3rd letter.

13 Press RETURN.

The fourth caption space turns red.

14 Press AV WINDOW +/- to select a blank space.



Select the 4th letter.

15 Press RETURN.

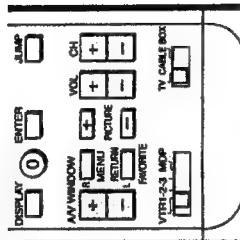
The setting is complete.
When you select or display the channel number, the channel caption also appears.

Setting VIDEO LABEL

Follow these instructions to label each input mode, in order to identify the equipment connected to each input terminal.

Example: Label VIDEO IN 1 as "VHS."

Remote Commander



1 Press MENU.

The main menu appears.



2 Press AV WINDOW +/- until the cursor points to "SET UP."

3 Press RETURN.

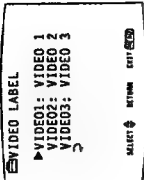
The set up menu appears.



4 Press AV WINDOW +/- until the cursor points to "VIDEO LABEL."

5 Press RETURN.

The VIDEO LABEL screen appears.



6 Press AV WINDOW +/- until the cursor points to the input mode you want to label. (In this case, the cursor is already pointing to "VIDEO 1.")

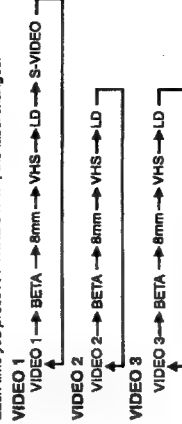
7 Press RETURN.

The label display turns red.

8 Press AV WINDOW +/- to select "VHS."



Each time you press AV WINDOW +/-, the label changes:



9 Press RETURN.

The setting is complete.
When you select or display the video mode, the video label appears.

To label other input modes

Repeat steps 6 - 8.

To change a label

Same as above.

To return to the previous menu

Press AV WINDOW +/- until the cursor points to

"MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU on the Remote Commander.

Using Timer-Activated Functions

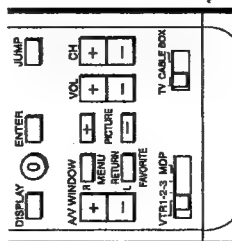
Setting DAYLIGHT SAVING

If you live in an area that uses daylight savings time, set DAYLIGHT SAVING to "YES" or "NO" depending on the season, before setting the current time. At the next daylight savings date, you will be able to automatically adjust all the time-related settings (CURRENT TIME, ON/OFF TIMER and CHANNEL BLOCK) simply by changing the DAYLIGHT SAVING setting.

When setting DAYLIGHT SAVING:

- After the first Sunday in April (spring daylight savings) Set to "YES" before setting the current time. Then, on the last Sunday in October (fall daylight savings), set to "NO."
- After the last Sunday in October (fall daylight savings) Set to "NO" before setting the current time. Then, on the first Sunday in April (spring daylight savings), set to "YES."
- All the time-related settings automatically move one hour ahead.

Remote Commander



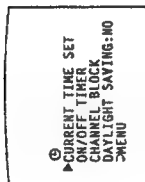
Follow these instructions to set DAYLIGHT SAVING to "YES" or "NO."

- Press MENU.
The main menu appears.



- Press AV WINDOW +/- until the cursor points to "TIME."

- Press RETURN.
The time menu appears.



- Press AV WINDOW +/- until the cursor points to "DAYLIGHT SAVING."

- Press RETURN.
The mode display turns red.

- Press AV WINDOW +/- to select "YES" or "NO."

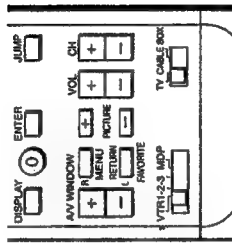
- Press RETURN.
The setting is complete.

Setting the clock—CURRENT TIME SET

Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

Example: Set the time to 3:15 PM, Monday.

Remote Commander

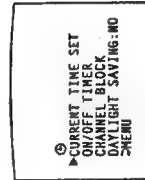


- Press MENU.
The main menu appears.

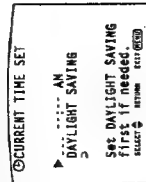


- Press AV WINDOW +/- until the cursor points to "TIME."

- Press RETURN.
The time menu appears, and the cursor points to "CURRENT TIME SET."



- Press RETURN again.
The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.



If you do not need to set DAYLIGHT SAVING, press RETURN and continue from step 5.

To set daylight saving

- Press AV WINDOW +/- until the cursor points to "DAYLIGHT SAVING."

- Press RETURN.
The time menu appears, and the cursor points to "DAYLIGHT SAVING."

- Press RETURN.

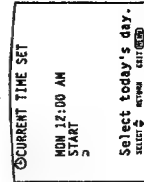
- Press AV WINDOW +/- to select "YES" or "NO."

- Press RETURN.
The setting is complete.

To set the time, press AV WINDOW +/- until the cursor points to "CURRENT TIME SET"; press RETURN, then continue from step 5.

- Press RETURN.
The CURRENT TIME SET screen appears, and the "SUN" display appears (red).

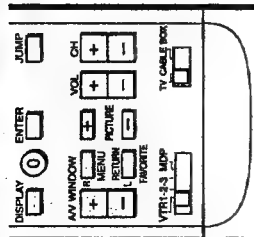
- Press AV WINDOW +/- to select "MON." Each time you press AV WINDOW +/-, the day changes consecutively.



(Continued)

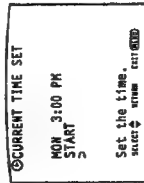
Setting the clock — CURRENT TIME SET

(Cont'd from prev page)
Remote Commander



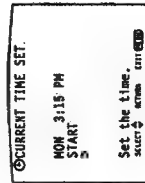
7 Press RETURN.
The hour and am/pm displays turn red.

8 Press AV WINDOW +/- to set "3:00PM."
Each time you press AV WINDOW +/-, the hour changes in sequence beginning with "12:00AM."



9 Press RETURN.
The minute display turns red.

10 Press AV WINDOW +/- to select "15" (minutes).
Each time you press AV WINDOW +/-, the minutes change in sequence.



11 Press RETURN.
The cursor points to "START."

12 Check the actual time, and press RETURN to start the clock.
The setting is complete.

To reset the time
Display the CURRENT TIME SET screen and repeat steps 5-12.

To display the current time
Press DISPLAY.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU."
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

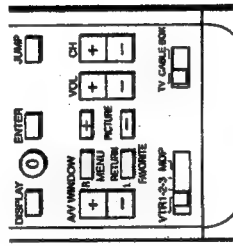
To return to the normal screen
Press MENU on the Remote Commander.

Setting the ON/OFF TIMER

Follow these instructions to make the program of your choice appear on the screen at a specified time.

Example: Set the timer to turn on the TV every Monday through Friday at 1:30 AM for 3 hours, on channel 8, as PROGRAM 1. (You can set up to three programs.)

Remote Commander



1 Press MENU.
The main menu appears.



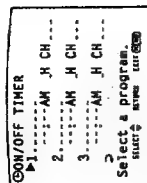
2 Press AV WINDOW +/- until the cursor points to "TIME."

3 Press RETURN.
The time menu appears.



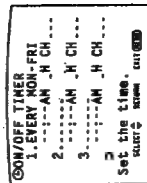
4 Press AV WINDOW +/- until the cursor points to "ON/OFF TIMER."

5 Press RETURN.
The ON/OFF TIMER screen appears, and the cursor points to "1."

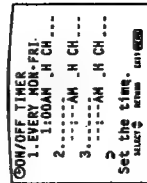


6 To set program 1, press RETURN.
(To set program 2 or 3, press AV WINDOW +/- until the cursor points to that program; then press RETURN.)
The day input space turns red.

7 Press AV WINDOW +/- to select "EVERY MON-FRI"; then press RETURN.
Each time you press AV WINDOW +/-, the days of the week change as shown in Fig. 1 (p. 59).



8 Press AV WINDOW +/- to select "1:00AM"; then press RETURN.
Each time you press AV WINDOW +/-, the hour changes in sequence.

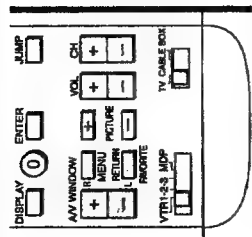


(Continued)

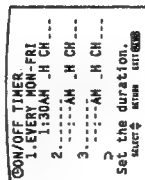
Using Timer-Activated Functions

Setting the ON-OFF TIMER (Cont'd from prev. page)

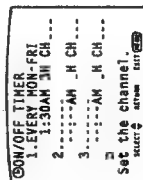
Remote Commander



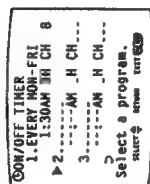
9 Press AV WINDOW +/- to select "30" (minutes); then press RETURN.
Each time you press AV WINDOW +/-, the minutes change in sequence.



10 Press AV WINDOW +/- to select "3" (hour duration); then press RETURN.
Each time you press AV WINDOW +/-, the duration changes from "1" - "6" in sequence.



11 Press AV WINDOW +/- to select "8" (channel); then press RETURN.
The TIMER/STAND BY indicator lights, indicating that the setting is complete.
Each time you press AV WINDOW +/-, the channel number changes from 1 - 125 in sequence.



The display "TV WILL TURN OFF" appears on the screen one minute before the timer duration ends.

To set program 2 or 3.
Press RETURN and repeat steps 6 - 11.

To erase an ON/OFF TIMER setting
Display the ON/OFF TIMER screen, select the setting you want to erase, and select a blank space for the day.
The ON/OFF TIMER setting is erased.

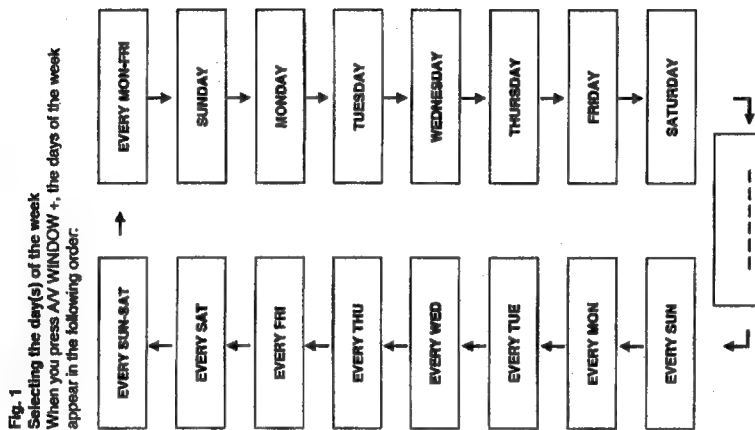
To enter a new ON/OFF TIMER setting
Display the ON/OFF TIMER screen and repeat steps 6 - 11.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU".
Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Note
If you unplug the TV or a power failure occurs, both the clock and timer settings will be erased. Reset the current time; then set the timer.



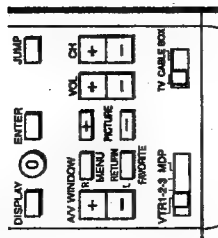
Using Timer-Activated Functions

Setting CHANNEL BLOCK

Follow these instructions to prevent a channel from appearing on the screen during the time that you specify. You can use this function to prevent children from watching unsuitable programs.

Example: Set CHANNEL BLOCK every Saturday at 4:30 PM for 1 hour, on Channel 12.

Remote Commander



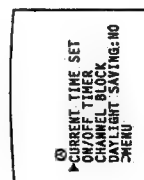
Note
If you have not set the current time, the "CHANNEL BLOCK" display is shaded and cannot be selected.

1 Press MENU.
The main menu appears.



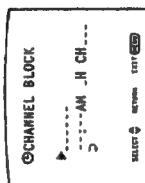
2 Press AV WINDOW +/- until the cursor points to "TIME".

3 Press RETURN.
The time menu appears.



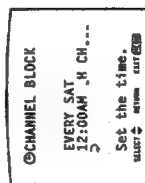
4 Press AV WINDOW +/- until the cursor points to "CHANNEL BLOCK".

5 Press RETURN.
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.

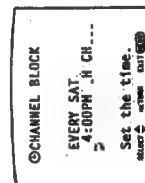


6 Press RETURN.
The day input space turns red.

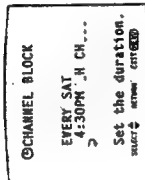
7 Press AV WINDOW +/- to select "EVERY SAT"; then press RETURN.
Each time you press AV WINDOW +/-, the days of the week change as shown in Fig. 1 (p. 69).



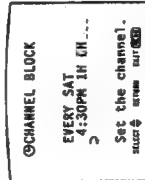
8 Press AV WINDOW +/- to select "4:00PM"; then press RETURN.
Each time you press AV WINDOW +/-, the hour changes in sequence.



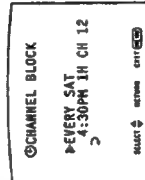
9 Press AV WINDOW +/- to select "30" (minutes); then press RETURN.
Each time you press AV WINDOW +/-, the minutes change in sequence.



10 Press AV WINDOW +/- to select "1" (hour duration); then press RETURN.
Each time you press AV WINDOW +/-, the duration changes from "1" - "6" in sequence.



11 Press AV WINDOW +/- to select "12" (channel); then press RETURN.
The setting is complete.
Each time you press AV WINDOW +/-, the channel number changes from "1" - "125" in sequence.



At the specified time, "BLOCKED" appears in red on the screen, and the picture of the specified channel is blocked and the sound is muted.



To erase a CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen, select the setting you want to erase, and select a blank space for the day. The CHANNEL BLOCK setting is erased.

To enter a new CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen and repeat steps 4 - 10. (You can only set one CHANNEL BLOCK at a time.)

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU". Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

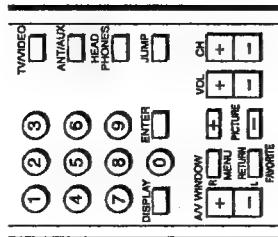
To return to the normal screen
Press MENU on the Remote Commander.

Note
If the ON/OFF TIMER is set for an overlapping time (pp. 57 - 59), the later time setting takes precedence. For example, if CHANNEL BLOCK is set for 2:00 PM and ON/OFF TIMER is set for 3:00 PM, ON/OFF TIMER will take effect at 3:00 PM.

Setting FAVORITE CHANNEL

By setting FAVORITE CHANNEL, you can select the channels you use most frequently (up to seven channels) simply by pressing RETURN on the Remote Commander.

Remote Commander (RM-Y113A)



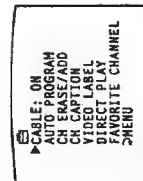
Follow these instructions to set the channels.

- 1 Press MENU.
The main menu appears.



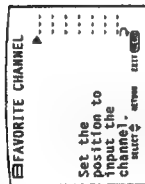
- 2 Press AV WINDOW +/- until the cursor points to "SET UP."

- 3 Press RETURN.
The set up menu appears.



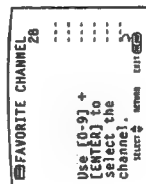
- 4 Press AV WINDOW +/- until the cursor points to "FAVORITE CHANNEL."

- 5 Press RETURN.
The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position.



- 6 Press AV WINDOW +/- to select the channel position; then press RETURN.

- 7 Press 0 - 9 and ENTER to set the channel number.



- 8 Press RETURN.
The setting is complete.

To set other channels
Repeat steps 6 - 8.

To erase a favorite channel setting
Press AV WINDOW +/- until the cursor points to the channel number you want to erase; press RETURN, then press 0 and ENTER.

To reset a favorite channel setting
Display the FAVORITE CHANNEL screen and repeat steps 6 - 8.

To return to the previous menu
Press AV WINDOW +/- until the cursor points to "MENU." Then press RETURN.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Selecting a favorite channel

After setting the channels, follow these instructions to select the channel you want to watch.

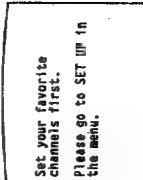
- 1 Press RETURN.
The FAVORITE CHANNEL display appears.



Note
If you have set channel captions (pp. 51 - 52), the captions appear with the channel numbers.

- 2 Press AV WINDOW +/- to select the channel you want to watch; then press RETURN.
The channel is selected.

If you press RETURN on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Follow steps 1 - 8 to set your favorite channels, and then make the selection.

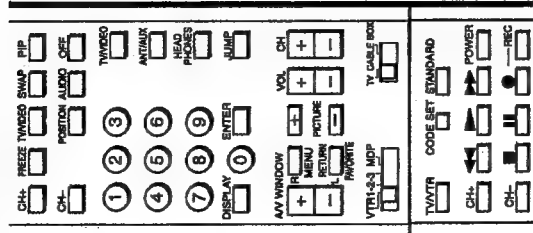
Using the Pre-Programmed Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

Operating Sony video equipment

Follow these instructions to operate Sony video cassette recorders (Beta, 8 mm and VHS) and video disc players (including multi-disc players).

Remote Commander (RM-Y113A)
(with video control cover open)



1 Set the VTR1-2-3 MDP selector according to the video equipment you want to operate.



Fig. 2: Video equipment settings

If you want to operate a:	Set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

2 Use the video operating buttons to control the connected equipment.

Fig. 3: Operating a VCR (VTR1, 2, 3)

To turn on or off	Press POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/-.
To record	Press ● and REC simultaneously.
To play	Press ▶.
To stop	Press ■.
To fast forward	Press ►►.
To rewind the tape	Press ◄◄.
To pause	Press II.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

Fig. 4: Operating a Video Disc Player (MDP)

To turn on or off	Press POWER.
To play	Press ▶.
To stop	Press ■.
To pause	Press II.
To resume normal playback, press again.	
Note	This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV goes off (standby mode) if you press II.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.

Notes

- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
- If you set another manufacturer's code to a VTR1-2-3 MDP selector position (pp. 66 - 67), you must also set the Sony code to operate Sony equipment.

Caution

When you replace the batteries, do it within approximately 30 minutes. Otherwise the settings you made under the Pre-Programmed function (pp. 66 - 68) may be erased.

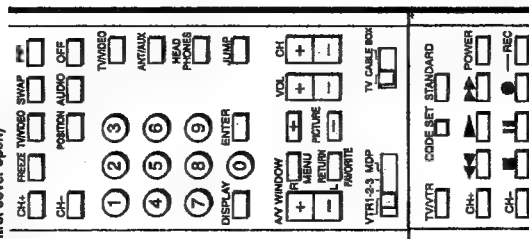
Using the Pre-Programmed Remote Commander

Operating non-Sony or Sony video equipment

Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pre-programmed Remote Commander.

Example: Operate an RCA video cassette recorder connected to the VIDEO IN 2 jacks.

Remote Commander (RM-Y113A)
(with video control cover open)



1 Set the VTR1-2-3 MDP selector to VTR2.



Note

To use another manufacturer's equipment besides a Sony VCR, set the selector to a position not being used for your Sony video equipment.

Fig. 5: VCR manufacturer code numbers

MANUFACTURER	CODE
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
DAIICHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

Fig. 7: Sony Equipment and Code Numbers

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

Note

In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

Fig. 6: MDP manufacturer code numbers

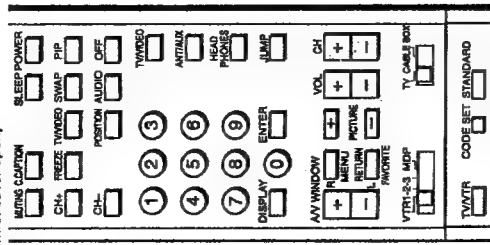
MANUFACTURER	CODE
SONY	04
KENWOOD	58
MAGNAVOX	52
MARANZ	54
DAIICHI	51
PANASONIC	55
PHILIPS	52
PIONEER	61
RCA	51
SANYO	57
SHARP	56
YAMAHA	53

Operating a cable converter box

Follow these instructions to set the manufacturer's code, which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

Example: Operate a connected Zenith cable converter box.

Remote Commander (RM-Y113A)
(with video control cover open)



1 Set the TV/CABLE BOX selector to CABLE BOX.

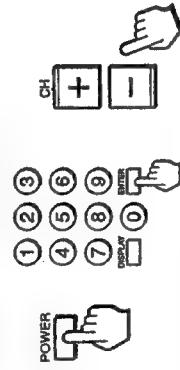


- Notes**
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
 - If you enter a new code number, the code number you previously entered at that setting is erased.
 - In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

2 While pressing CODE SET, press 6 and 8 (Zenith's code number — see Fig. 8) and ENTER.



3 Use the TV control buttons (POWER, 0-9, ENTER and CH +/-) to operate the cable converter box.



To return to the normal screen
Set the TV/CABLE BOX selector to TV; then use the TV control buttons to control the TV.

For more details on operating the cable box
Refer to the operating instructions that come with the cable box.

Fig. 8: Cable box manufacturer code numbers

MANUFACTURER	CODE
JERROLD	80, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

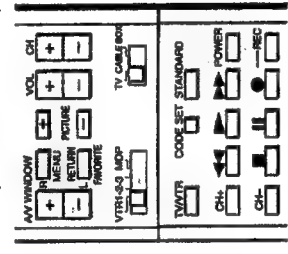
Selecting a VCR mode directly — DIRECT PLAY

Follow these instructions to switch from TV to VCR mode by simply pressing the ► (playback) button on the supplied Remote Commander.

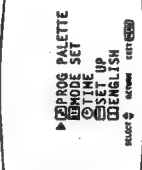
Example: Connect your VCR to the VIDEO IN 1 jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press ►, the input mode changes to the VCR connected to the VIDEO IN 1 jacks.

After completing the steps below, the VTR selector position is retained in the TV's memory.

Remote Commander (with video control cover open)



1 Press MENU.



2 Press AV WINDOW +/- until the cursor points to "SET UP."

3 Press RETURN.

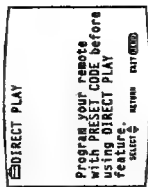
The set up menu appears.



4 Press AV WINDOW +/- until the cursor points to "DIRECT PLAY."

5 Press RETURN.

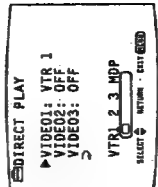
A message screen appears.



Note
This screen reminds you to set the manufacturer's code, if you have not already done so (pp. 66-67).

6 Press RETURN again.

The DIRECT PLAY screen appears.



7 Press AV WINDOW +/- until the cursor points to the video input mode. (When the video equipment is connected to VIDEO IN 1, select "VIDEO1.")

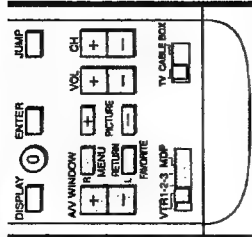
8 Press RETURN.

The mode display turns red.

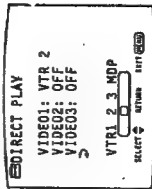
(Continued)

Selecting a VCR mode directly — DIRECT PLAY

Remote Commander



9 Press AV WINDOW +/- to select the VTR selector mode you have set on the Remote Commander. (When the VTR1-2-3 MDP selector is set to VTR2, select "VTR 2.") Each time you press AV WINDOW +/-, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



10 Press RETURN. The direct play setting is complete.

To set direct play for other connected video equipment Repeat steps 7 - 10.

To return to the previous menu Press AV WINDOW +/- until the cursor points to "MENU." Then press RETURN.

To return to the main menu Repeat the above, until you reach the main menu.

To return to the normal screen Press MENU on the Remote Commander.

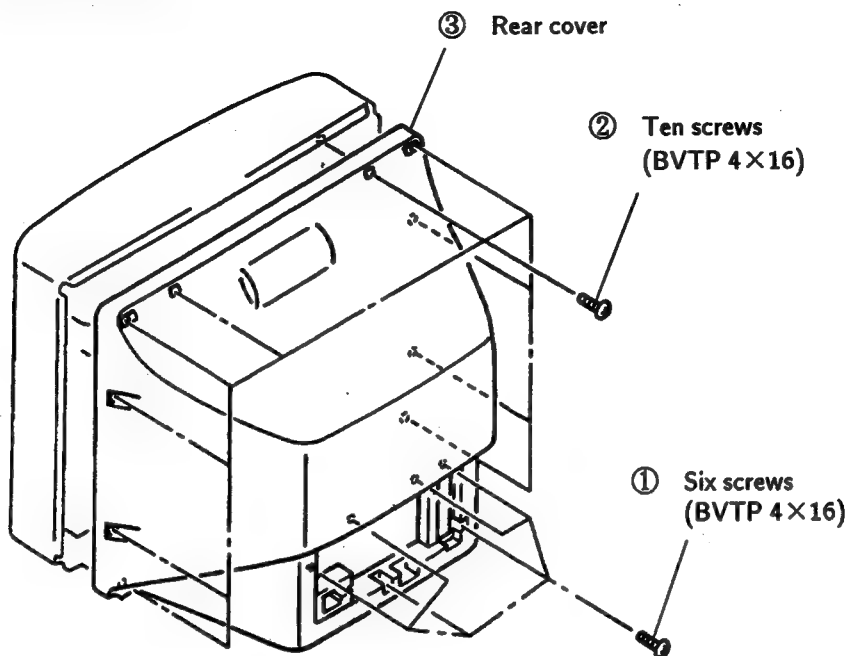
Appendix Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, contact your nearest service facility.

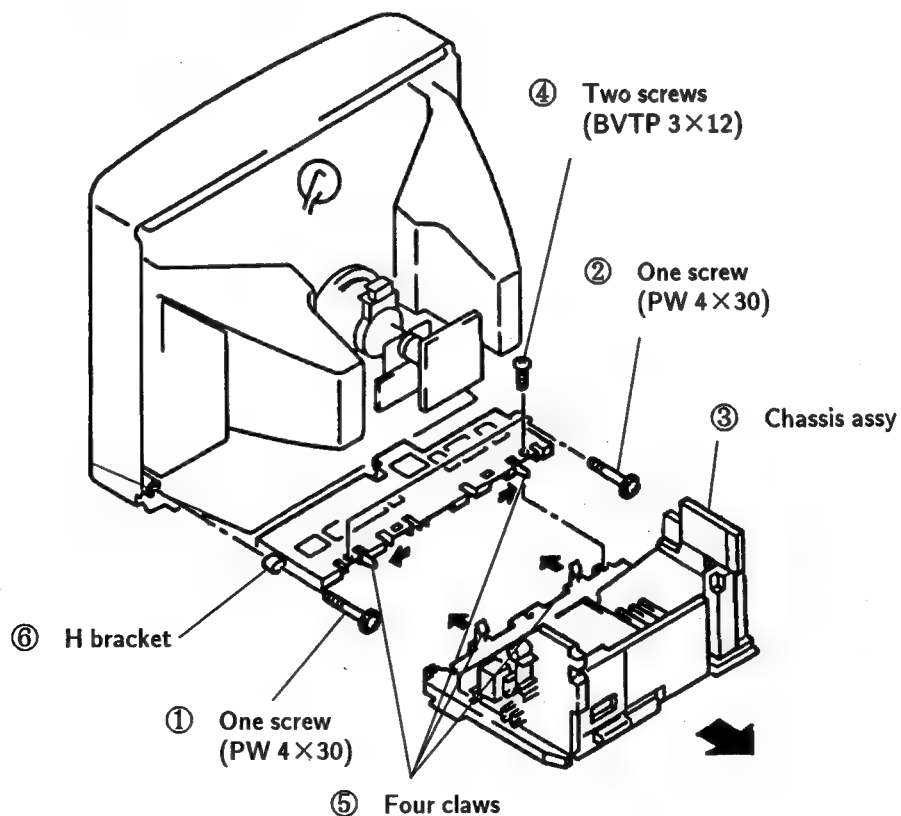
Symptom	Possible causes and remedies
No picture (screen not lit), no sound	<ul style="list-style-type: none"> Make sure POWER is switched on. Check the power cord connection. Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. Make sure that the TV/CABLE BOX selector is set to TV.
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> Adjust the picture using the VIDEO screen (pp. 42 - 45). Check the antenna/cable connections.
Good picture, no sound	<ul style="list-style-type: none"> Press VOLUME + on the TV or VOL + on the Remote Commander. Press MUTE on the Remote Commander. Check the MTS setting (p. 49). Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. Make sure SPEAKER is set to ON (p. 50).
No color for color programs	<ul style="list-style-type: none"> Check the HUE and COLOR settings (pp. 42 - 43).
Snow and noise only	<ul style="list-style-type: none"> Check that it is an active or correct channel. Check the cable setting. Check the ANT/AUX button setting (KV-27XBR36/32XBR36/32XBR78 only). Check antenna/cable connections.
Dotted lines or stripes	<p>This is often caused by local interference (for example, cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.</p>
Double images or ghosts	<p>Reflections from nearby mountains or buildings often cause this problem. Connecting a highly directional outdoor antenna or a CATV cable may improve the picture.</p>
Try another channel. It could be station trouble.	

SECTION 2 DISASSEMBLY

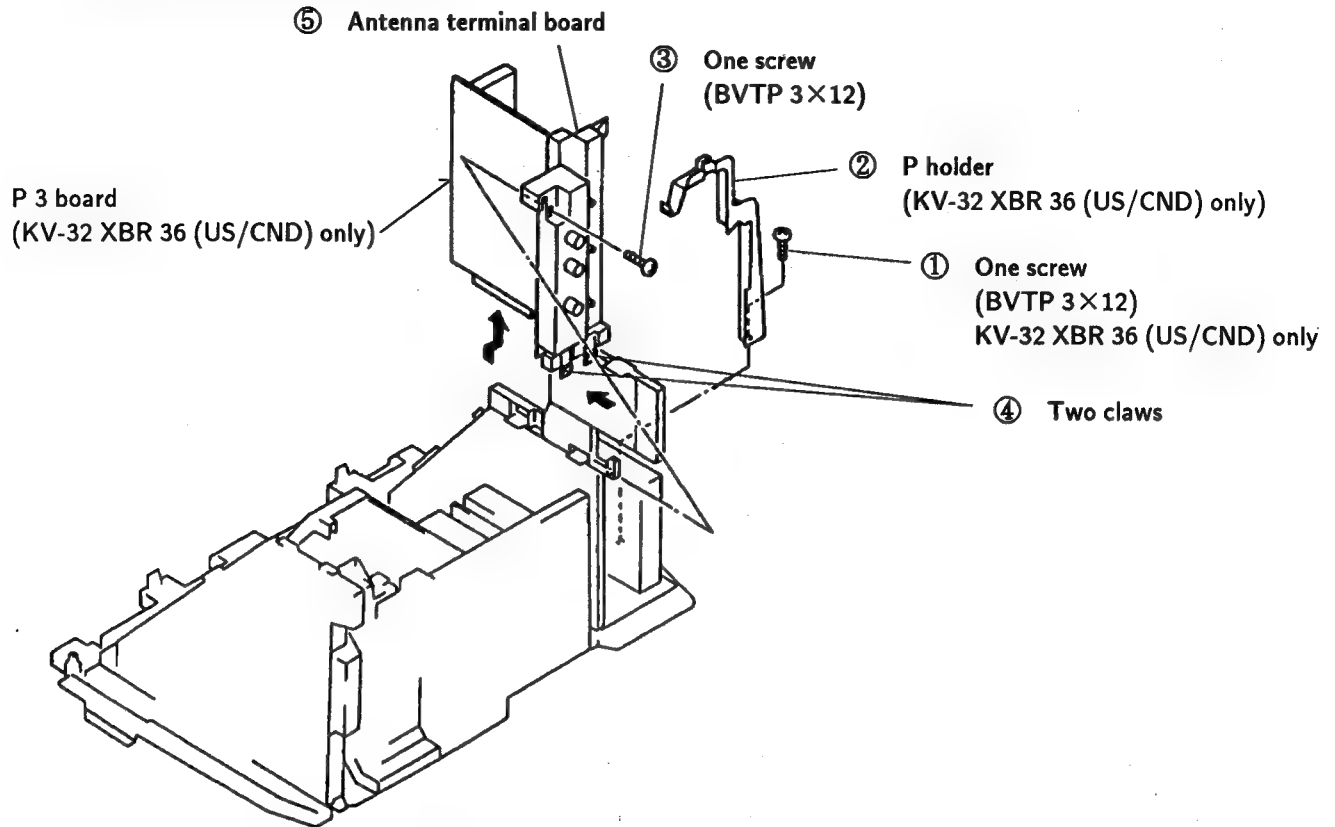
2-1. REAR COVER REMOVAL



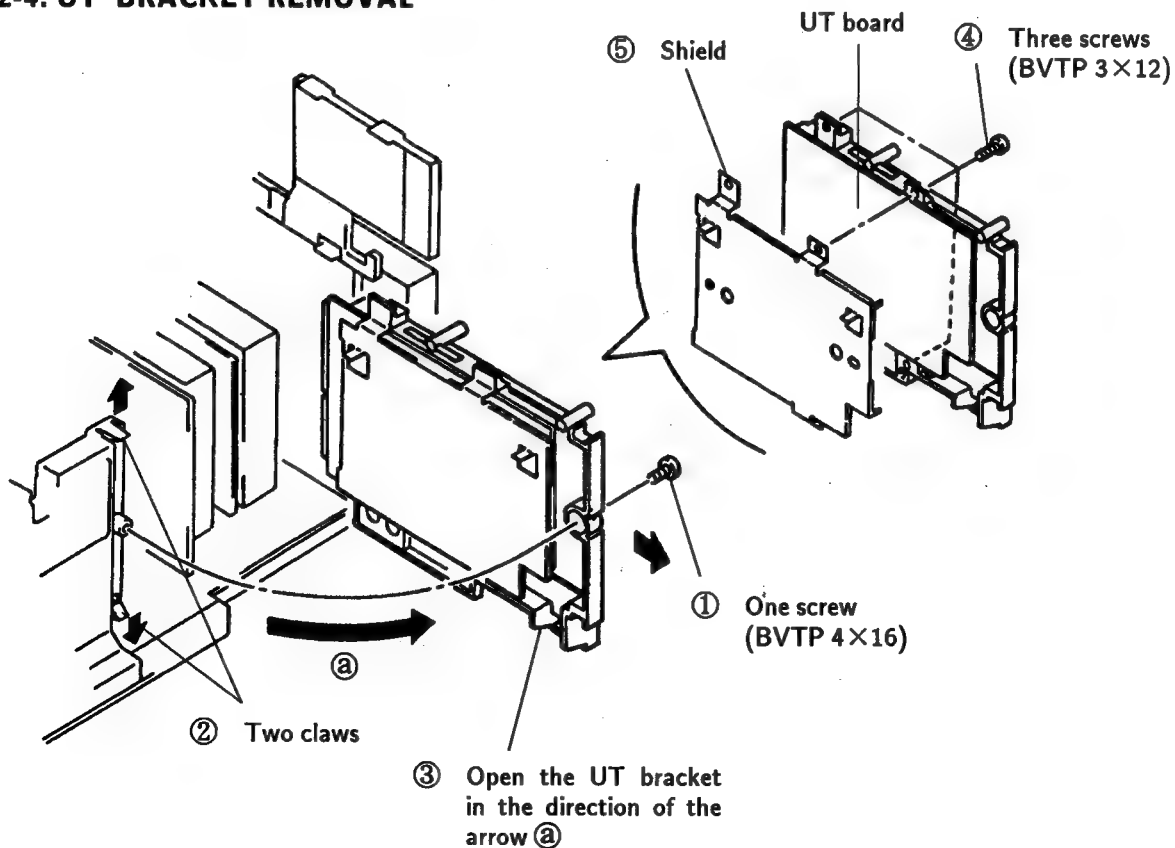
2-2. CHASSIS ASSY AND H BRACKET REMOVAL



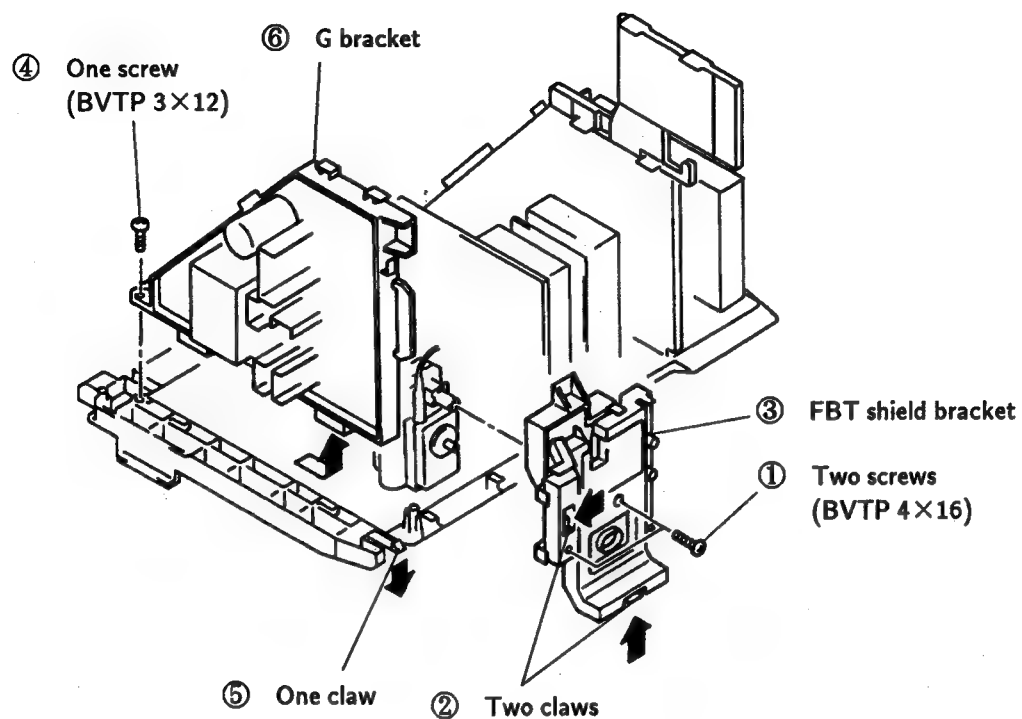
2-3. ANTENNA TERMINAL BOARD REMOVAL



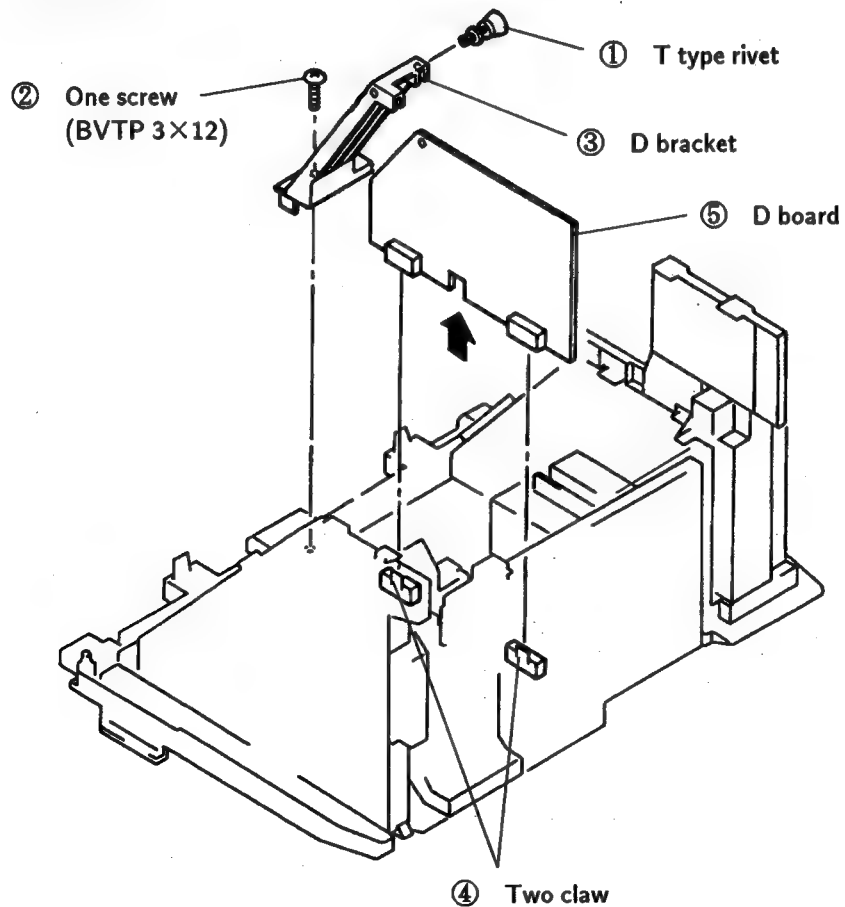
2-4. UT BRACKET REMOVAL



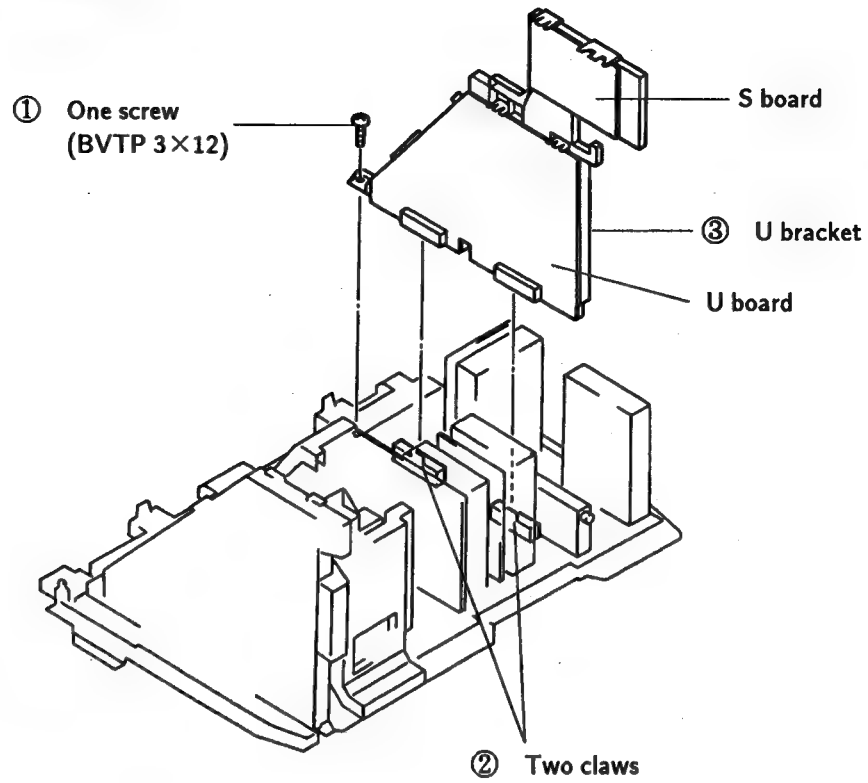
2-5. G BRACKET REMOVAL



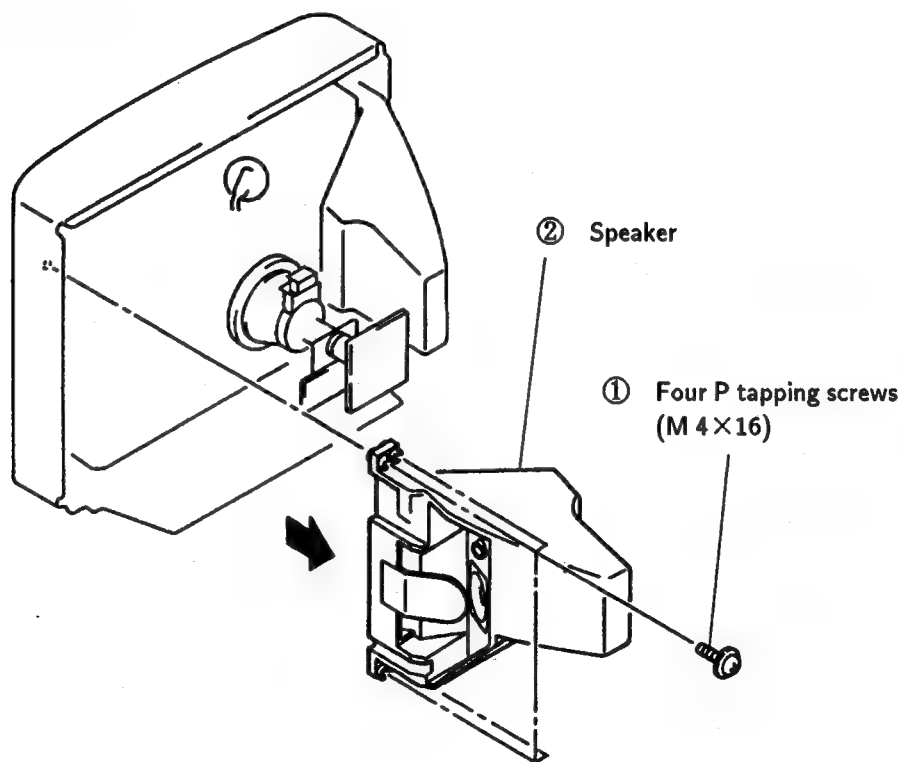
2-6. D BOARD REMOVAL



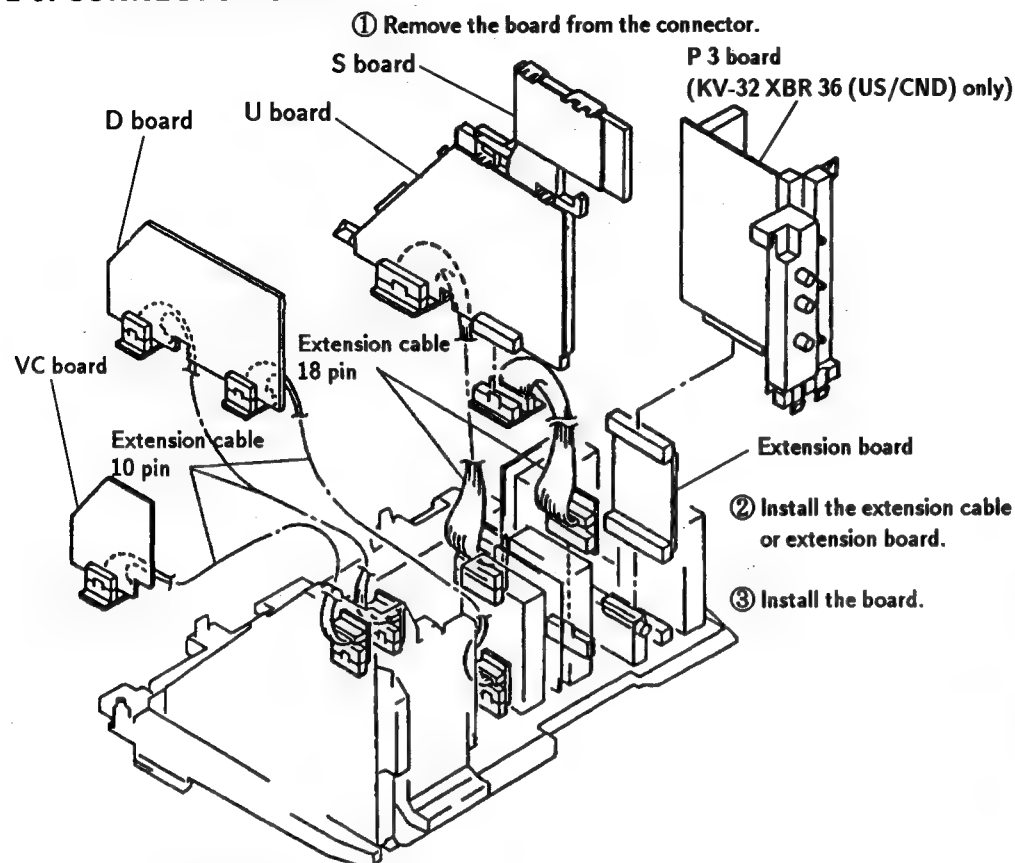
2-7. U BRACKET REMOVAL



2-8. SPEAKER REMOVAL

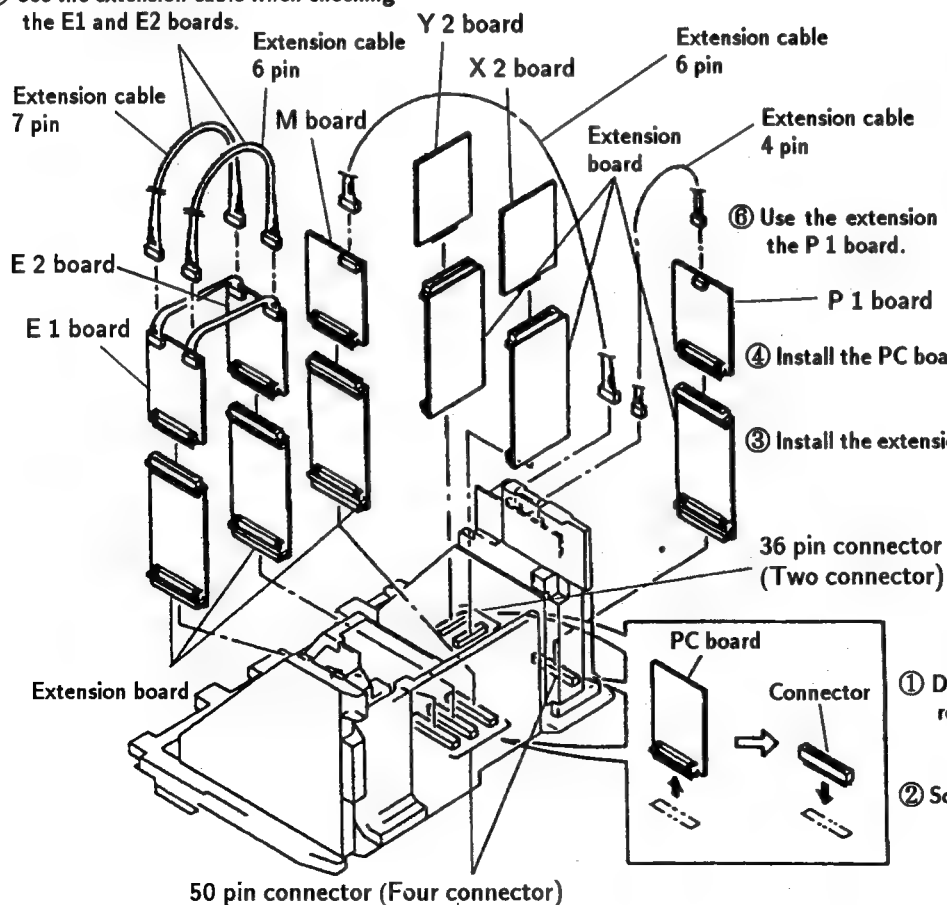


2-9. CONNECTOR CABLE



Exterior	
Extension cable	
4 pin	1-941-891-33
6 pin	1-941-891-31
7 pin	1-941-891-32
18 pin	3-702-558-01
10 pin	3-702-557-01
36 pin connector	3-702-561-01
50 pin connector	3-702-560-01
36P/50P	3-702-559-01
Extension board	36P/50P

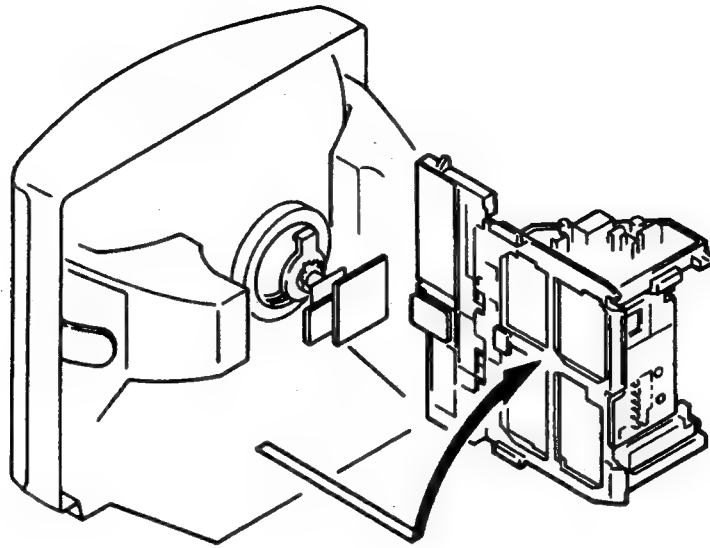
⑤ Use the extension cable when checking the E1 and E2 boards.



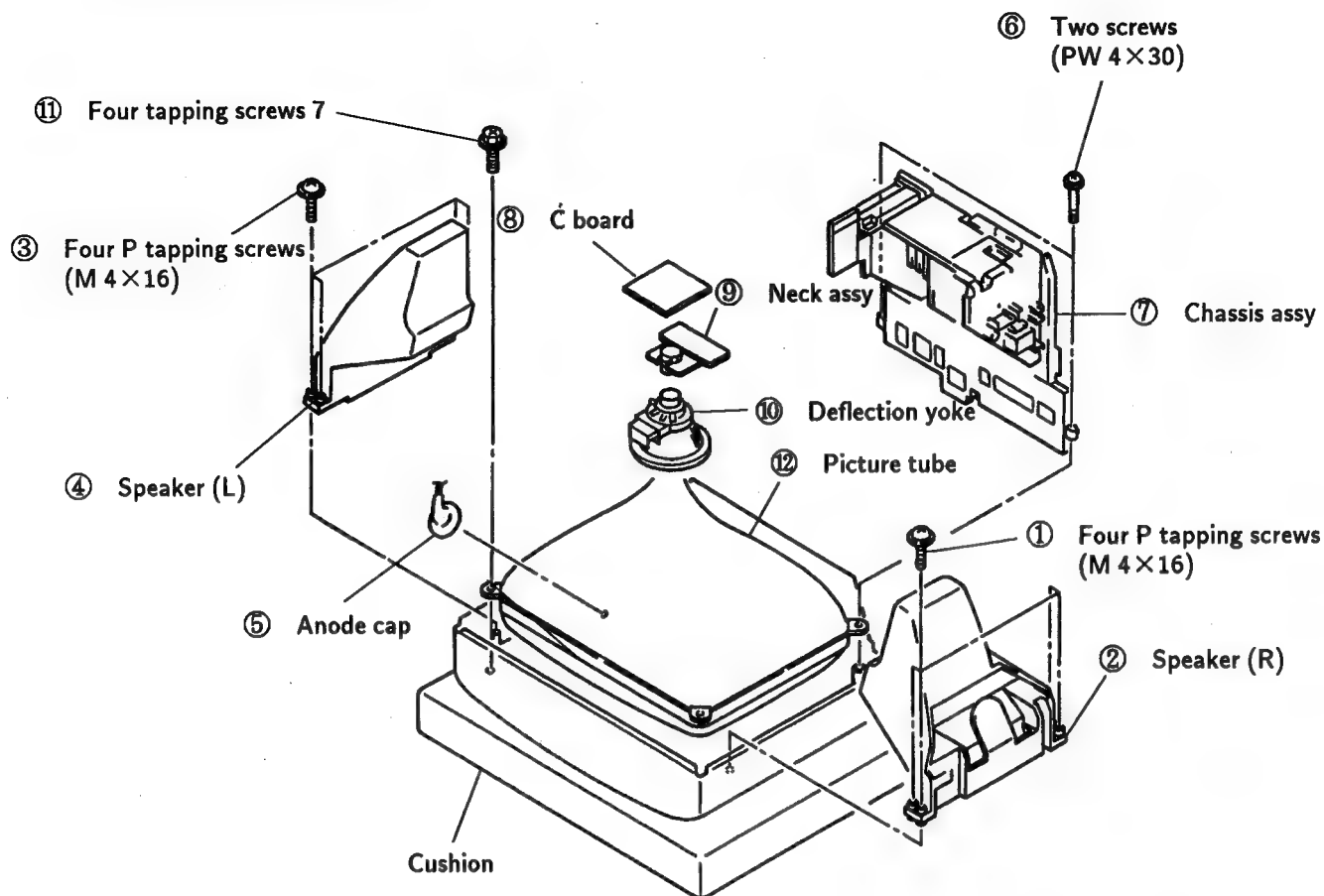
① De-solder the PC board and remove it.

② Solder the connector.

2-10. SERVICE POSITION



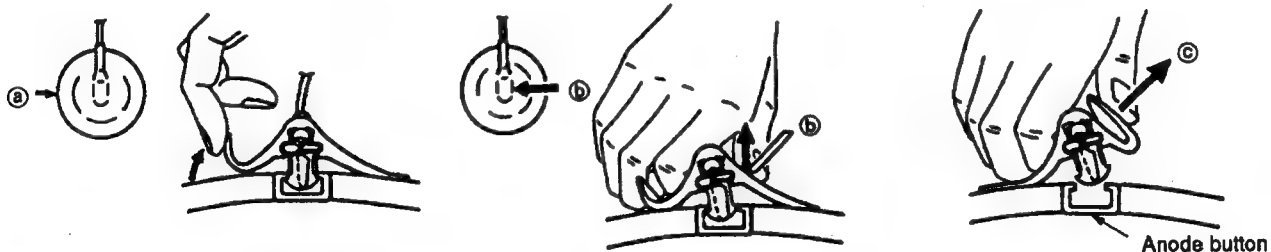
2-11. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

• REMOVING PROCEDURES



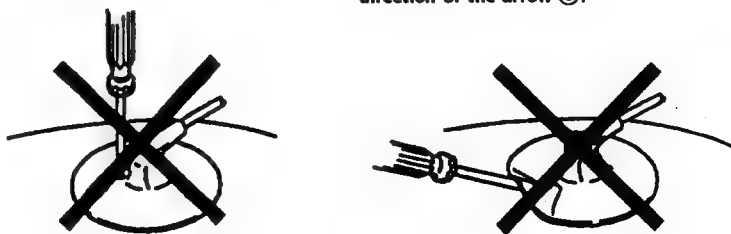
① Turn up one side of the rubber cap in the direction indicated by the arrow (a).

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b).

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow (c).

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardy not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardy!
The shatter-hook terminal will stick out or hurt the rubber.



2-12. REPAIR OF CHIP COMPONENT CIRCUIT BOARD

2-12-1. POINTS OF COMPONENT REMOVAL

Handling of blower type soldering iron

If hot blast is too strong or applied from a slanting direction, small components and solder near the component being removed can be blown off. Do not use blower type without temperature control.

2-12-2. NOTES ON SOLDERING FOR CHIP COMPONENTS

- 1) During soldering a chip component, if a soldering iron is applied for a long time, the heat may damage the component or cause pattern peeling.
- 2) Do not reuse a removed component. The characteristics of such a component may deteriorate.
- 3) Use wire solder containing silver ($\phi 0.3$ or $\phi 0.6$). (The pin electrodes of the laminated chip capacitor are silver + palladium, so if wire solder which does not contain silver is used, the silver of the pin electrode will be sucked into the solder.)

2-12-3. REMOVAL AND MOUNTING OF COMPONENTS

Chip resistor and chip capacitor

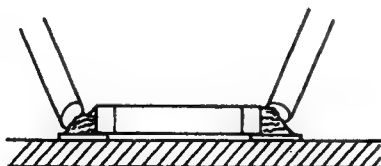
REMOVAL

- Using two soldering irons

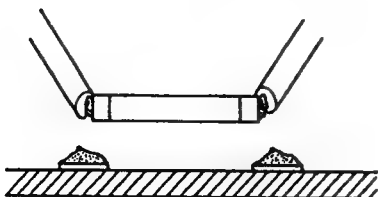
1) Mounted state



2) Melt the solder.

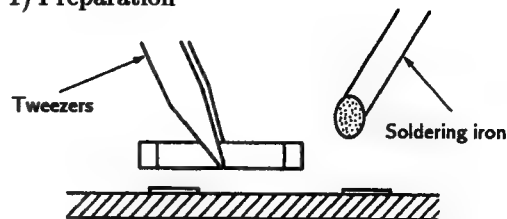


3) Remove the component.



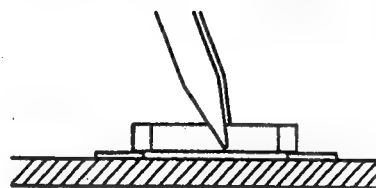
SOLDERING

1) Preparation

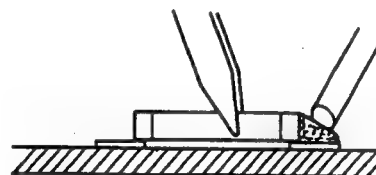


2) Location

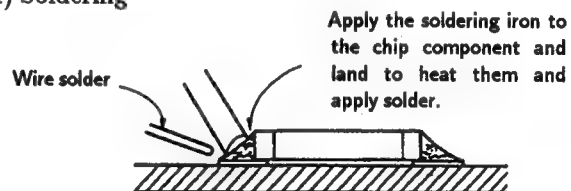
Be careful not to misposition.



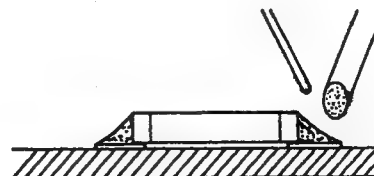
3) Tack soldering and flux application



4) Soldering



5) Soldering (Fix the fillet.)



6) Visual inspection

Check for the following defects :

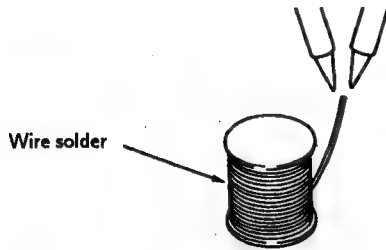
- No-soldered part
- Bridge (to other components or lands)
- Mispositioning
- Other defects

2-12-4. MINI-TRANSISTOR

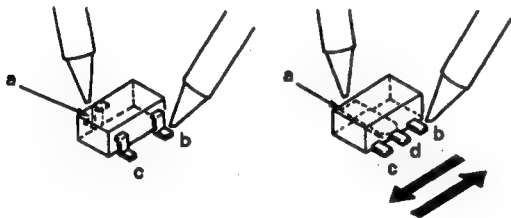
REMOVAL

- Using two soldering irons

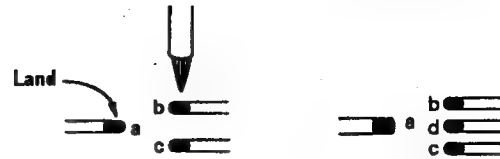
- 1) Put a little solder on the tip of two soldering irons.



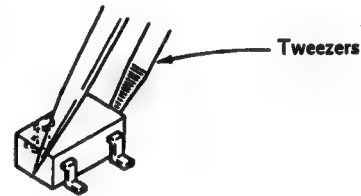
- 2) Apply the tip of one soldering iron to the point "a" and the other to the points "b" → "c" (or "b" → "d" → "c") and move the component in the directions indicated by arrows in the figure to remove it.

**MOUNTING**

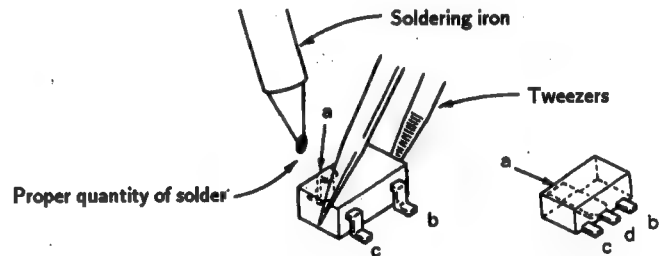
- 1) Apply a little flux to the land with a brush.



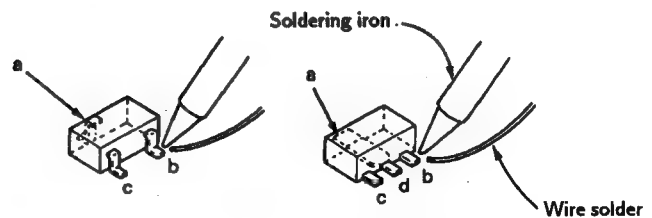
- 2) Place the component in position using tweezers.



- 3) Put a little solder on the tip of the soldering iron and solder the point "a" to fix the component.

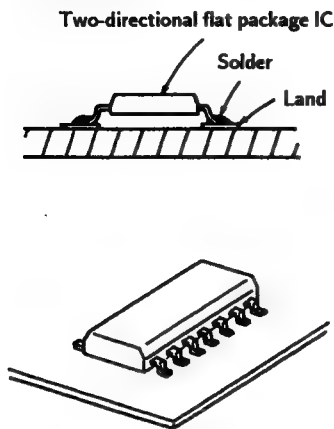


- 4) Bring the tip of the soldering iron and the wire solder close to the point to be soldered. Solder the points "b" → "c" (or "b" → "d" → "c") in order.

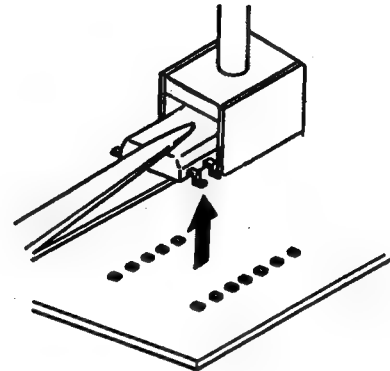


2-12-5. TWO-DIRECTIONAL FLAT PACKAGE IC

MOUNT CONDITION

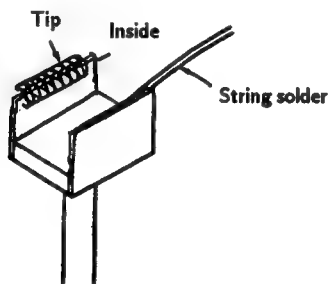


- 3) When the solder melts, lift the IC with a pair of tweezers and remove.

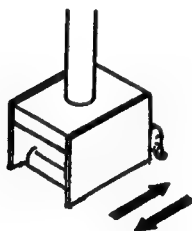


REMOVAL

- 1) Apply some solder on the inside and the tip of the iron tip jig.



- 2) Place the iron tip jig over the IC, and move the jig to and fro as shown in the figure.

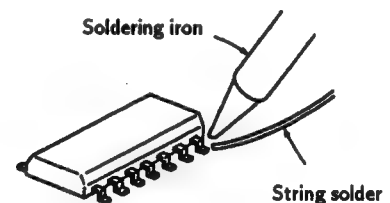


INSTALLATION

- 1) Place the two-directional flat package IC at the appointed position, solder pins a and b on the diagonal, and fasten it.

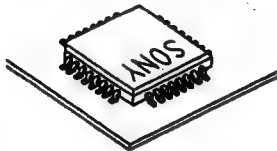
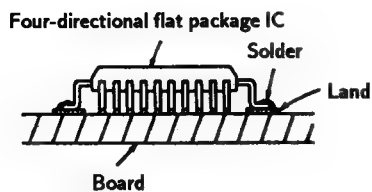


- 2) Solder the remaining pins with the soldering iron.



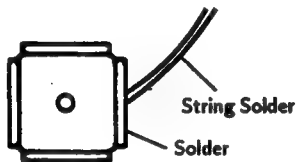
2-12-6. FOUR-DIRECTIONAL FLAT PACKAGE IC

MOUNT CONDITION

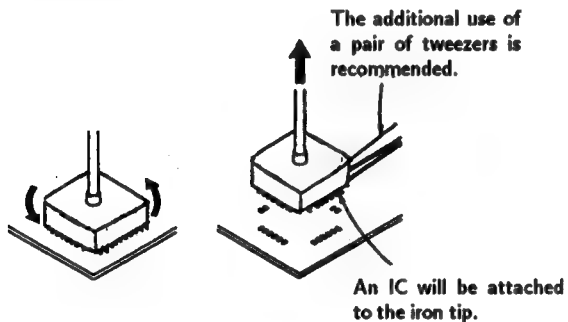


REMOVAL

- 1) Apply solder on the tip of the iron tip jig.



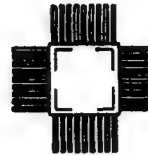
- 2) Place the iron tip jig over the IC, wait about two to three seconds, rotate the iron slightly and lift it up.



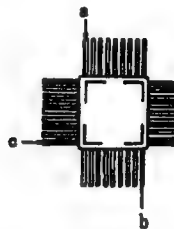
Note: For flat ICs of above 52 P, the IC may not be completely attracted when the iron tip jig is lifted up. In these cases, use a pair of tweezers to remove.

INSTALLATION

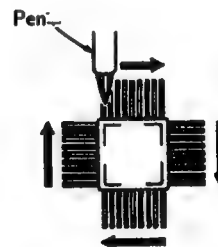
- 1) Place the four-directional flat package IC at the appointed position.



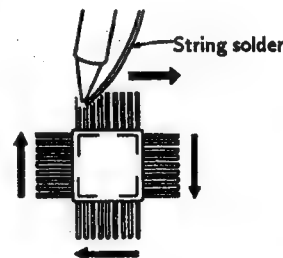
- 2) Apply a slight amount of solder on the iron tip, and solder the three sections in the order of a → b → c, and fix.



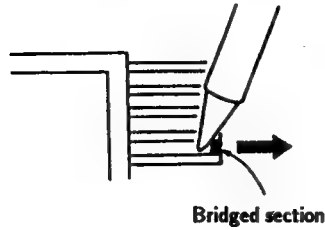
- 3) Apply a slight amount of flux with a pen on all four directions.



- 4) Apply solder on the iron tip and the string solder, and slide and solder in the directions of the arrows.

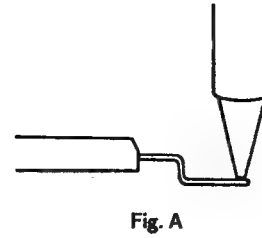


Note: 1) After soldering, if there are bridged sections, correct by sliding the soldering iron in the direction of the arrow.

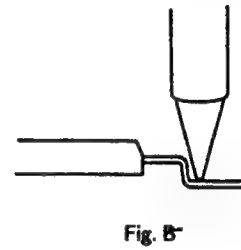


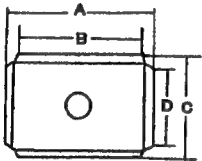
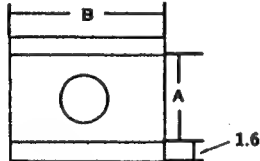
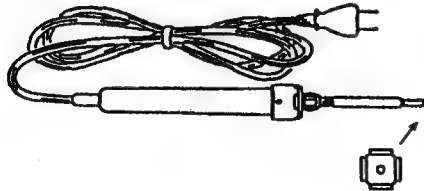

If the bridges cannot be corrected using the above method, apply some flux with a pen and try again.

2) Soldering can be carried out more easily by sliding the iron tip near the tip of the IC leg. (Fig. A)



Be careful not to slide the bent sections of the leg as shown in Fig. B as soldering bridges will be formed.



Exterior	Description	Part No.	Measure (mm)			
			A	B	C	D
	jig for removing 4-sided flat package IC	3-702-554-01	12.5	9.5	12.5	9.5
		" 11	15.5	12.5	15.5	12.5
		" 21	16.3	13.3	16.3	13.3
		" 31	17.0	14.0	17.0	14.0
		" 41	23.0	20.0	17.0	14.0
		" 51	20.0	17.0	20.0	17.0
	jig for removing 2-sided flat package IC	3-702-555-01	6.0	5.0		
		" 11	6.0	10.0		
		" 21	7.0	12.5		
		" 31	9.0	15.2		
		" 41	9.0	18.0		
	soldering iron	3-702-552-01	55 W 60 g length 210 mm			
	soldering holder	3-702-553-01				

SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted :

PICTURE control RESET
BRIGHTNESS control center

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
Contrast } normal
Brightness }
2. Position neck ass'y as shown in Fig 3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.
(See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
(See Figure 3-4.)

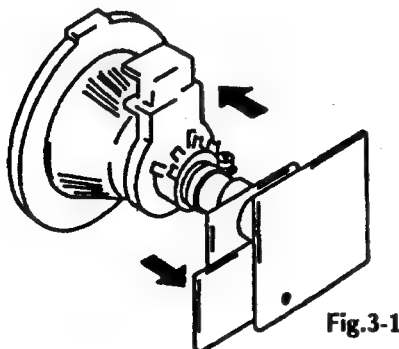


Fig.3-1

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

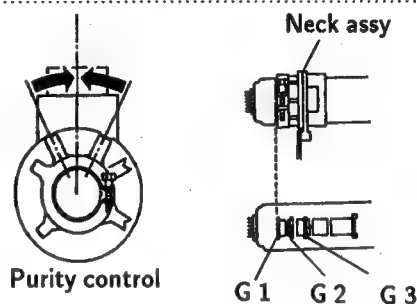


Fig.3-2

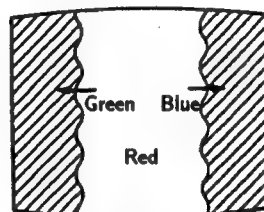


Fig.3-3

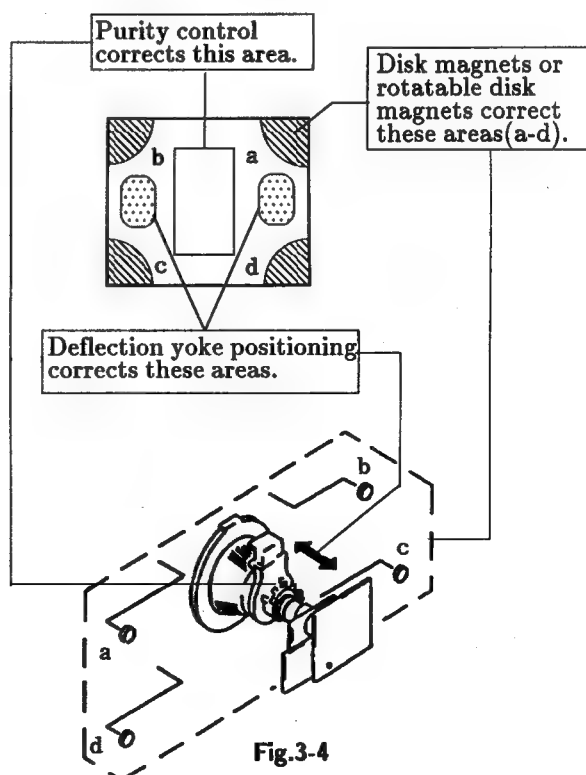
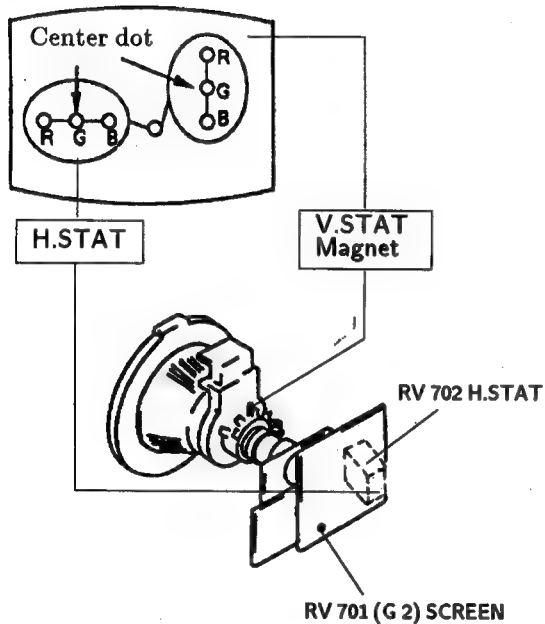


Fig.3-4

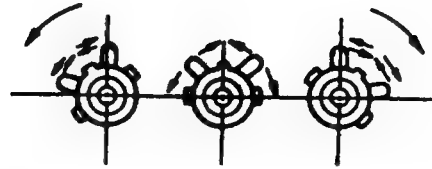
3-2. CONVERGENCE**Preparation :**

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

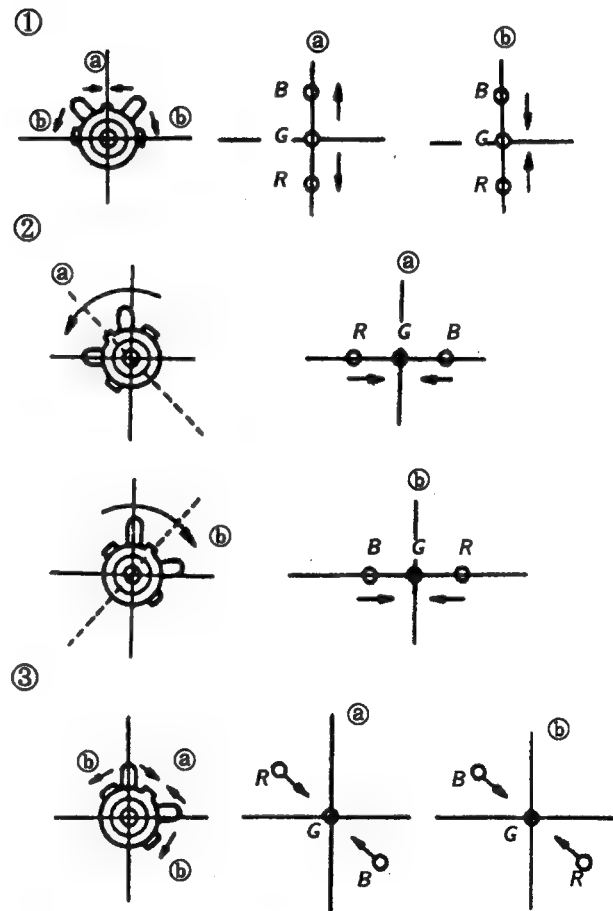
(1) Horizontal and Vertical Static Convergence

1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V. STAT magnet influence each other)

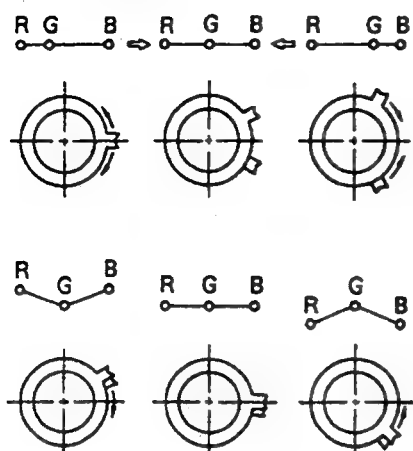
- Tilt the V. STAT magnet and adjust the static convergence by opening or closing the V. STAT magnet.



4. If the V. STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.



• Operation of BMC (Hexapole) Magnet



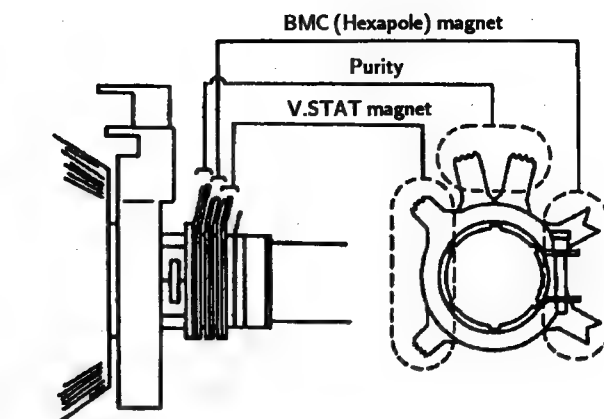
- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking. Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

(2) Dynamic Convergence Adjustment

Preparations :

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

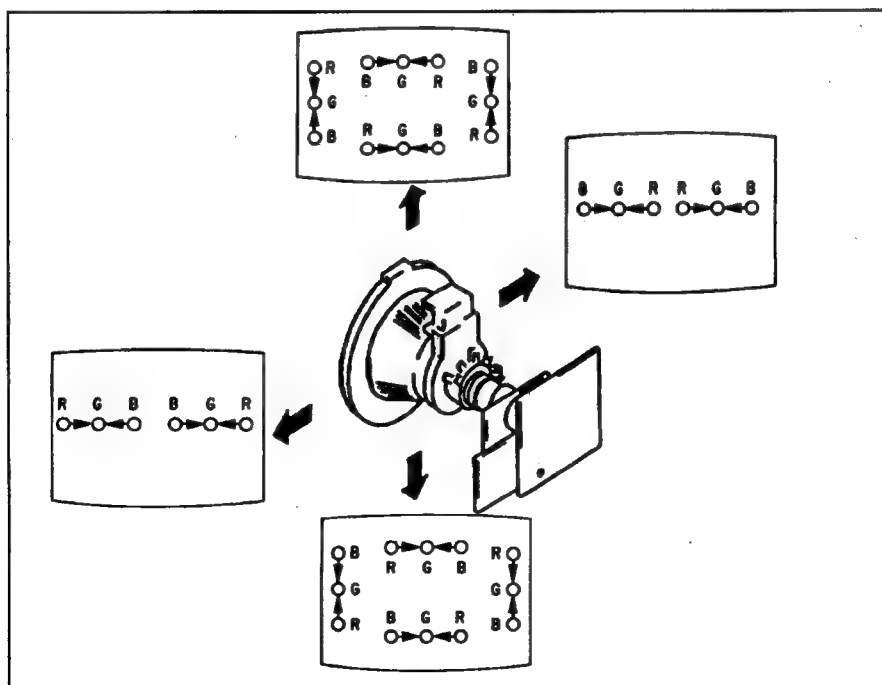
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.



• Y separation axis correction magnet adjustment

1. Receive the cross-hatch signal, and adjust [PIX] to "MIN" and [BRT] to "standard".
2. Adjust the deflection yoke to the upright condition when it hits the CRT.
3. Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical at the top and bottom (open state).
4. Return the deflection yoke to its original position.

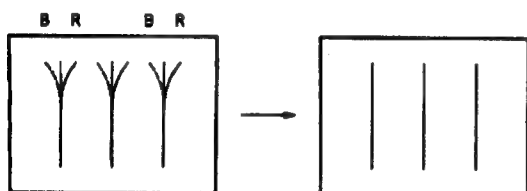
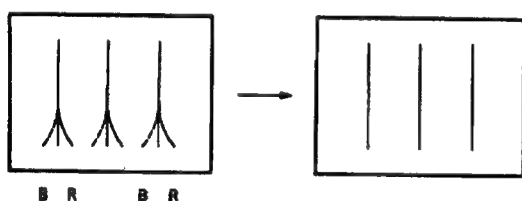
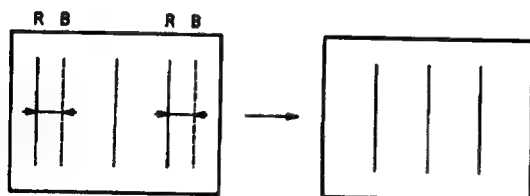
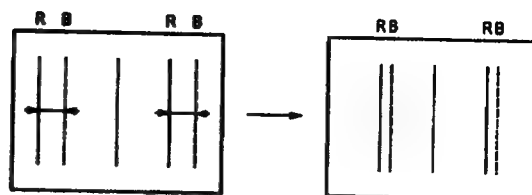
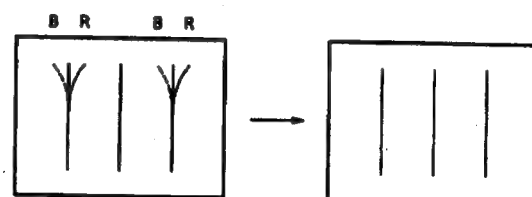
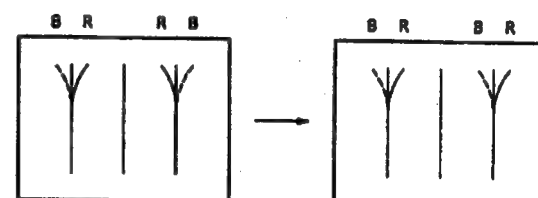
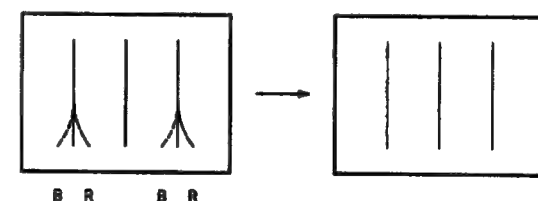
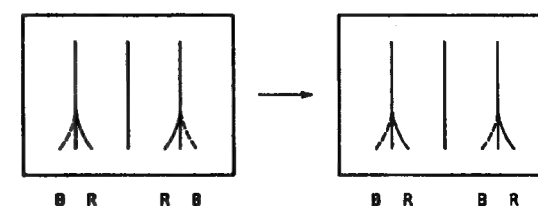
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the defelection yoke spacer.



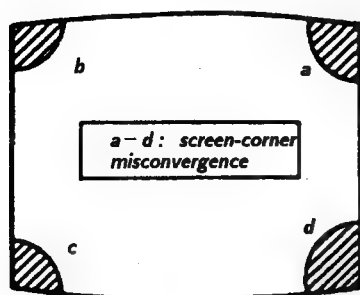
(3) Dynamic Convergence Circuit Adjustment

- Set to Service Mode.
- Input a cross-hatch signal.
- Press **1** and **4** select an item of adjustments.
- Adjust **3** and **6** to the best picture.

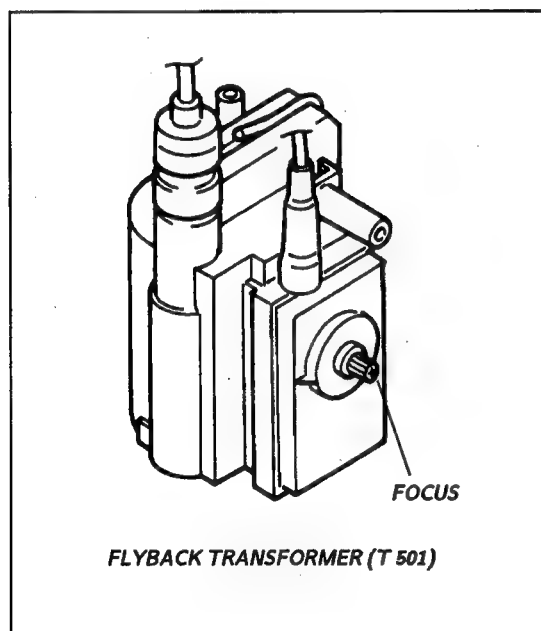
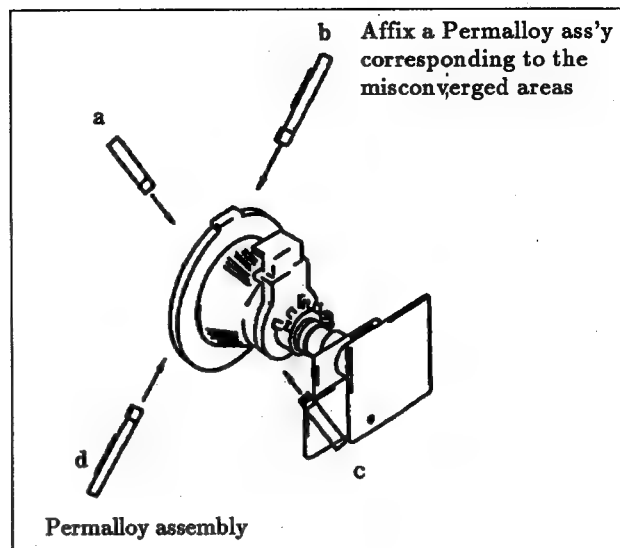
ITEM	REFERENCE DATA	NAME REGISTER	
UYBO	39	VP	U. Y. BOW
LYBO	39	VP	L. Y. BOW
HAMP	26	VP	H. AMP
HTILT	36	VP	H. TILT
UCBO	20	VP	U. C. BOW
UTIL	44	VP	U. TILT
LCBO	31	VP	L. C. BOW
LTIL	63	VP	L. TILT
DCSH	19	VP	DC. SHIFT

U. YBOWSelect UYBO with **1** and **4****L. YBOW**Select LYBO with **1** and **4****H. AMP**Select HAMP with **1** and **4****H. TILT**Select HTILT with **1** and **4****U. CBOW**Select UCBO with **1** and **4****U. TILT**Select UTIL with **1** and **4****L. CBOW**Select LCBO with **1** and **4****L. TILT**Select L. TIL with **1** and **4**

(4) Screen-corner Convergence

**3-3. FOCUS ADJUSTMENT**

Adjust FOCUS control on the flyback transformer for a best focus.



3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G 2 (SCREEN) ADJUSTMENT(RV 701)

- 1) Set the PICTURE and BRIGHTNESS to normal.
- 2) Confirm G 1 voltage is within 30.0 ± 5 V.
- 3) Apply DC voltage of 180 V to the cathodes of R,G and B from DC stabilized power source.
- 4) While watching the picture, adjust the G2 control (RV 701) to the just the retrace line disappears.

(Using the Remote Commander)

2. WHITE BALANCE ADJUSTMENTS

※ ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER (See page 55, 56)

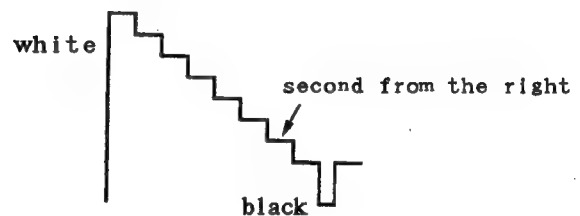
- 1) Set to service mode.
- 2) Press **STANDARD** to normal and if necessities "TRINITONE" set to "LOW" by **+** or **-**.
- 3) Input an entire white signal.
- 4) Set the PICTURE to minimum.
- 5) Select S BRT with **1** and **4**, and then set the level to minimum with **3** and **6**.
- 6) Select G CUT and B CUT with **1** and **4**.
And adjust the level with **3** and **6** for the best white balance.
- 7) Set the PICTURE to maximum.
- 8) Select G AMP and B AMP with **1** and **4** and adjust the level with **3** and **6** for the best white balance.
- 9) Write into the memory by pressing **MUTING** → then **ENTER**.

- WHITE BALANCE ADJUSTMENT OF THE WINDOW PICTURE -

- 1) Press P/P to display a window picture.
- 2) Input an entire-white signal.
- 3) Adjust RV 3003 (SUB BRT) on P 1 board to control the window as similar to the white pattern as possible.

3. SUB BRIGHT ADJUSTMENT

- 1) Set to service mode.
- 2) Input a staircase signal of black and white from the pattern generator.
- 3) BRIGHTNESS ... RESET
PICTURE minimum
- 4) Select SBRT with **1** and **4**, and adjust SUB BRIGHT level with **3** and **6** so that the stripe second from the right is dimly lit.



SECTION 4

SAFETY RELATED ADJUSTMENTS

A BOARD

☒ R565 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ☒ on the schematic diagram).

IC502, Q509, Q510, R565, R567, R568, R569

①

1. Preparation before confirmation

- 1) Remove R651 on the G board and connect a variable resistor (RV1: about $10k\Omega$) between pin ① of IC651 and B+ line.
- 2) Supply $120 \pm 2.0V$ AC to with variable auto-transformer.

2. Hold-down operation confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and adjust ABL current to $1640 \pm 20\mu A$ with PICTURE and BRIGHT etc controls.
- 2) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is less than $152.0V$ DC whereby the raster disappears during operation of hold-down circuit.

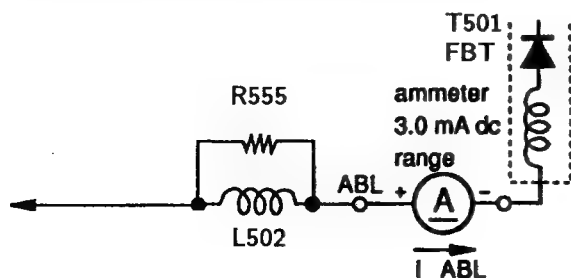
NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

- 3) Turn the POWER switch ON, and input a dot signals and adjust ABL current to $140 \pm 20\mu A$ with PICTURE and BRIGHT etc controls.
- 4) Increase B+ line voltage gradually by adjusting the resistor of RV1. Confirm that the minimum voltage is lower than $154.5V$ DC whereby the raster disappears during operation of hold-down circuit.

NOTE: When the Hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R565 (a component marked with ☒).



A BOARD

☒ R566 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ☒ on the schematic diagram).

IC502, IC651, Q509, Q510, D502, C531, R554, R566, R567, R568, R569, R651, R1506, T501

②

1. Preparation before confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
- 2) Confirm that voltage of the check terminal of pin ② of A-0 connector is more than $100.0V$ DC when the set is operating normally with $120.0 \pm 2.0V$ AC supply.

2. Hold-down operation confirmation

- 1) Turn the POWER switch ON, and input an entirely white signals and set the PICTURE and BRIGHT controls to maximum.
- 2) Apply DC voltage of over $130 \pm 2.0V$ DC gradually to the check terminal of pin ② of A-0 connector via 1SS119 from the DC stabilized power source.

Confirm that the minimum voltage is lower than $120.5V$ DC whereby the raster disappears during operation of hold-down circuit.

NOTE: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

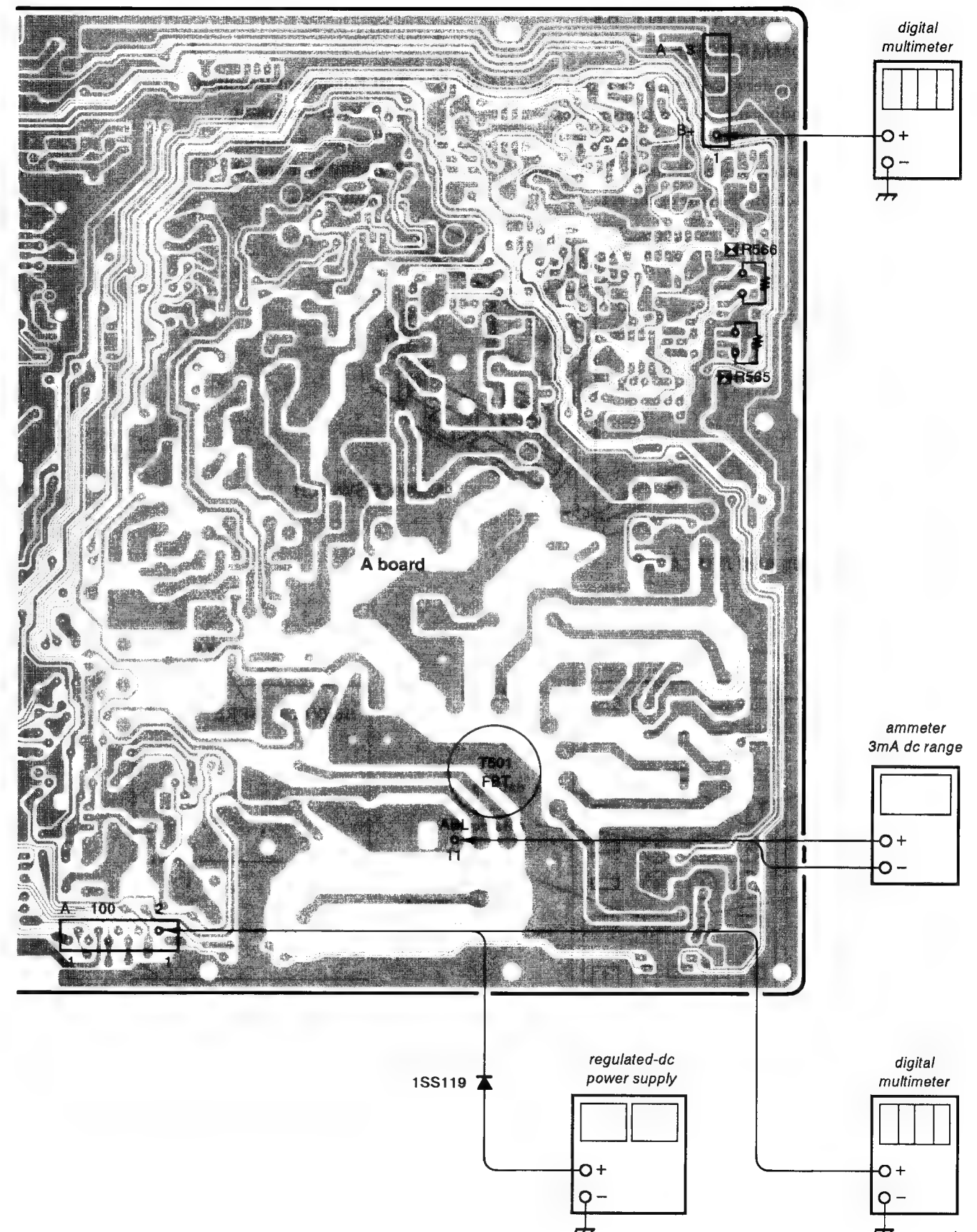
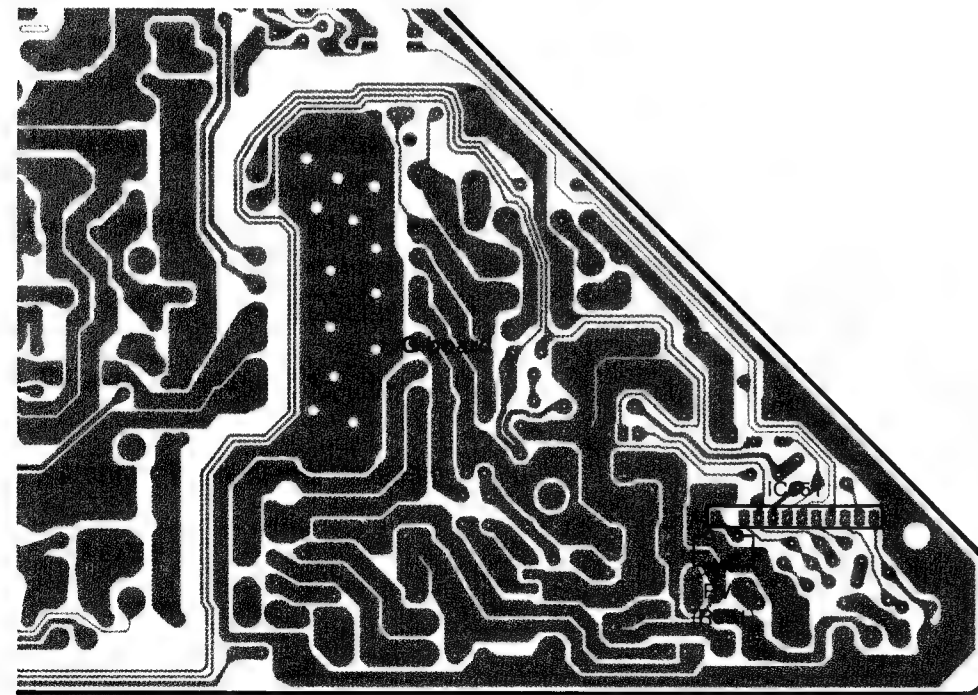
3. Hold-down readjustment

When step 2 is not satisfied, readjustment should be performed by altering the resistance value of R566 CARBON $1/4W$ (a component marked with ☒).

G BOARD**B+ VOLTAGE CONFIRMATION**

The following adjustments should always be performed when replacing IC651 and R651.

- 1) Supply $130 \pm 3\%$ V AC to with variable autotransformer.
- 2) Input an entirely monoscope signal.
- 3) Set the PICTURE control and the BRIGHT controls in to initial reset.
- 4) Confirm the voltage of A BOARD ① pin A-3 connector is less than 136.5V DC.
- 5) If step 4) is not satisfied, replace IC651 and R651 repeat above steps.



SECTION 5 CIRCUIT ADJUSTMENTS

5-1. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

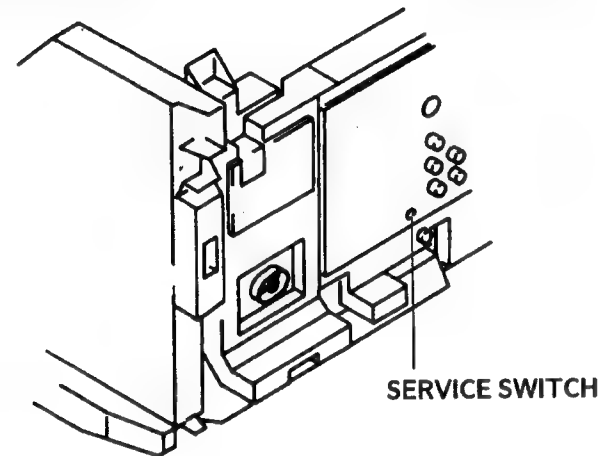
Use of Remote Commander (RM-Y112A, Y113A) can be performed circuit adjustments about this model.

1. METHOD OF SETTING THE SERVICE MODE

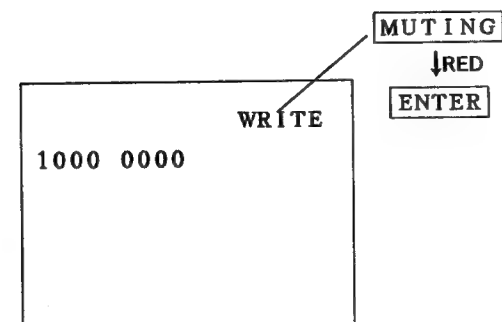
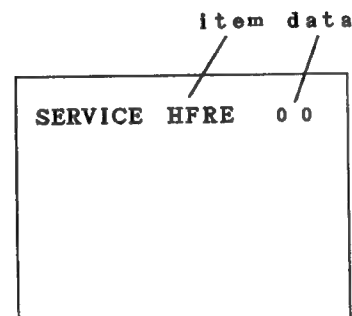
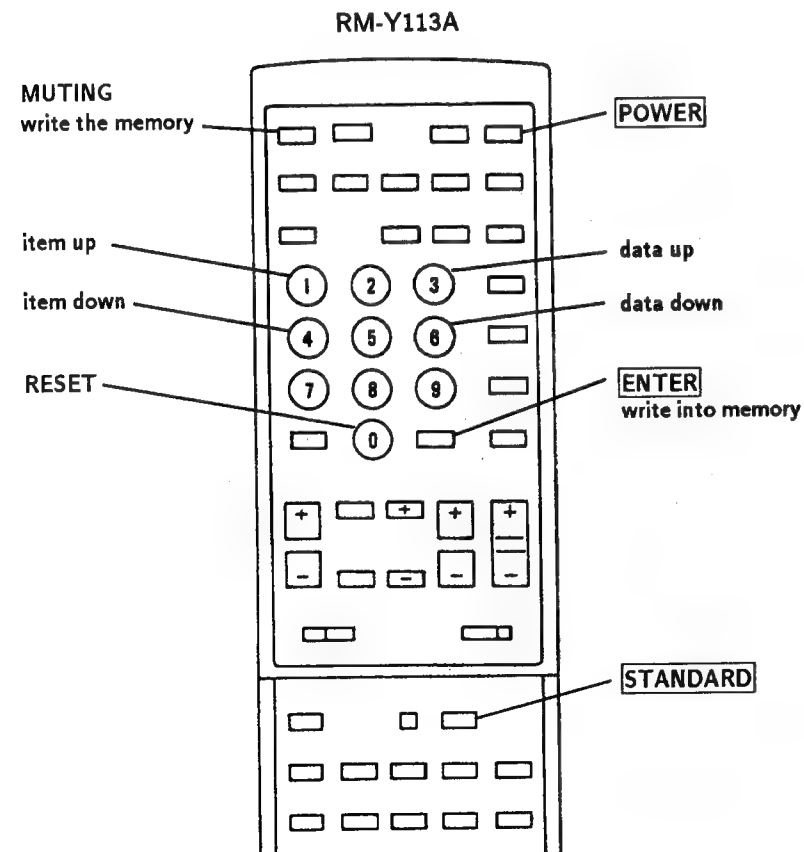
- 1) Press **POWER** button on the Remote Commander while pressing switch on the rear of the set.

NOTE : Test Equipment Required.

1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC



2. ADJUST BUTTONS AND INDICATOR



3. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME	REGIST
AFC	1	VP	AFC 1.0
HFRE	93	VP	H. FREQUENCE
VFRE	15	VP	V. FREQUENCE
VPOS	19	VP	V. SHIFT
VSIZ	32	VP	V. SIZE
VLIN	2	VP	V. LINEARITY
VSCO	3	VP	VS. CORRECTION
HPOS	9	VP	H. PHASE
HSIZ	25	VP	H. SIZE
PAMP	17	VP	PIN. AMP.
CPIN	4	VP	CORNER PIN
PPHA	8	VP	PIN. PHASE
VCOM	2	VP	V. COMP
GAMP	19	VP	GREEN AMP.
BAMP	9	VP	BLUE AMP.
GCUT	8	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SPIX	40	VP	PICTURE
SHUE	29	VP	HUE
SCOL	30	VP	COLOR
SBRT	40	VP	BRIGHT
RGBP	28	VP	RGB PICTURE
SHAP	7		SHARPNESS
DISP	35		OUTPUT
VSMO	0	VP	VSMO
REF	2	VP	REF 1.0
ROFF	1	VP	OFF NR
GOF	1	VP	OFF NG
BOFF	1	VP	OFF NB
ABLM	0	VP	ABLM
DRGB	1	VP	D RGB
YBOW	31	DE	Y BOW
VANG	35	DE	V. ANGLE
HTAP	31	DE	H. TRAP
TEST	0	AP	T
MPX	7	AP	ATT
FILO	31	AP	I1
DEEM	7	AP	I2
STEV	31	AP	OSC 1
SAPV	31	AP	OSC 2
PILO	7	AP	PILOT
SEP	31	AP	WIDE BAND
VD	7	AP	SPECTRAL
LVOL	0	AP	VOLUME-L
RVOL	0	AP	VOLUME-R
BASS	7	AP	BASS
TRE	7	AP	TREBLE

UYBO	39	DC	U.Y. BOW
LYBO	39	DC	L.Y. BOW
HAMP	26	DC	H.AMP
HTIL	36	DC	H.TILT
UCBO	20	DC	U.C. BOW
UTIL	44	DC	U.TILT
LCBO	31	DC	L.C. BOW
LTIL	63	DC	L.TILT
DCSH	19	DC	DC. SHIFT
PHPO	34	PI	READ DELAY H
PVPO	8	PI	READ DELAY V
PLEV	14	PI	PICTURE LEVEL
PFCO	11	PI	FRAME COLOR
NRLE	30		NR LEVEL
DSPP	31		

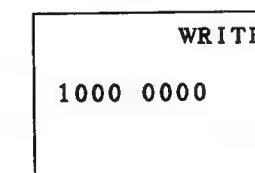
4. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press **POWER** button on the commander) in the next place, press **POWER** button again, hereupon it becomes TV mode.

5. METHOD OF WRITE FOR MEMORY

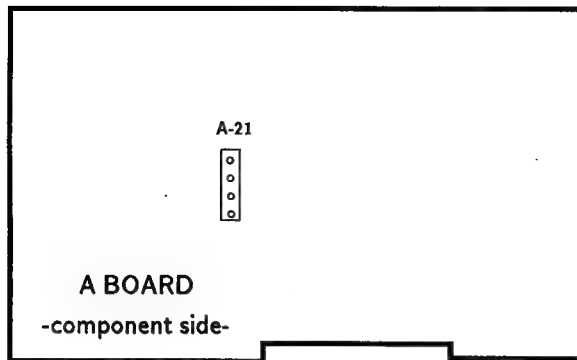
- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN), select an item of adjustments.
- 3) Press **MUTING** button indicate WRITE (RED) on screen.
- 4) Press **ENTER** button to write for memory.

6. MEMORY WRITE CONFIRMATION METHOD



- 1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again, confirm they were adjusted.

5-2. A BOARD ADJUSTMENTS



RF AGC ADJUSTMENT (IF BLOCK VR)

- 1) Input a color-bar signal.
- 2) Adjust AGC VR of TU 101 so that snow noise and cross-modulation disappear from the picture.
- 3) Confirm them at every channel.

H.FREQUENCY ADJUSTMENT (HFRE)

- 1) Set to Service Mode.
- 2) Input a color-bar signal.
- 3) Connect a frequency counter to base of Q 507.
- 4) Call the item of AFC, set to 3 level (free run).
- 5) Select HFRE with **[1]** and **[4]**.
- 6) Adjust **[3]** and **[6]** to the 15735 ± 60 Hz level.
- 7) Call the item of AFC again, adjust the level "01".
- 8) Write into the memory by pressing **[MUTING]** → then **[ENTER]**.

V.FREQUENCY ADJUSTMENT (VFRE)

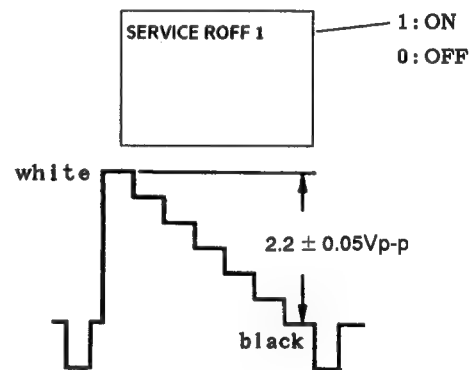
- 1) Set the Service Mode.
- 2) Input an off-air signal (VIDEO IN → no signal).
- 3) Connect the frequency counter across connector VDY-⊕ of DY-1 connector and ground.
- 4) Select VFRE with **[1]** and **[4]**.
- 5) Adjust **[3]** and **[6]** to the 55 ± 0.5 Hz.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.

SUB CONTRAST ADJUSTMENT (SPIX)

- 1) Set to Service Mode.
- 2) Input a color-bar signal. (75 IRE)
- 3) Set the conditions as follows.

PICTURE MAX
 COLOR MIN
 BRIGHT MIN
 R OFF ON
 G OFF OFF
 B OFF OFF

Press **[MENU]** and select VIDEO MENU → **[]** (L)
 (It becomes minimum).
 Select **[3]** (ON) and **[6]** (OFF) with **[1]** and **[4]**.

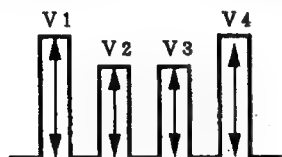


- 4) Connect an oscilloscope to TP49B of C board and ground.
- 5) Adjust **[3]** and **[6]** to the 2.2 ± 0.05 Vp-p level by selecting SPIX with **[1]** and **[4]**.
- 6) Write the memory by pressing **[MUTING]** → then **[ENTER]**.
- 7) Return the following back to normal after adjustment.

G OFF ON
 B OFF ON
 COLOR CENTER
 BRIGHT CENTER
 PICTURE 80%

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

- 1) Input a color-bar signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Connect an oscilloscope to TR 49 R of C board and ground.
- 5) Adjust **[3]** and **[4]** to the $V1=V4$ and $V2=V3$ by select to SHUE and SCOL with **[1]** and **[4]**.



- 6) Write into the memory by pressing **MUTING** → then **ENTER**.

V.SIZE ADJUSTMENT (VSIZ)

- 1) Set to Service Mode.
- 2) Press **STANDARD** to normal.
- 3) Input a cross-hatch signal.
- 4) Adjust **[3]** and **[6]** to the best vertical size by selecting VSIZ with **[1]** and **[4]**.
- 5) Write into the memory by pressing **MUTING** → then **ENTER**.

V SIZE (VSIZ)

**H.SIZE ADJUSTMENT (HSIZ)**

- 1) Input a cross-hatch signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Adjust **[3]** and **[6]** to best horizontal size by selecting HSIZ with **[1]** and **[4]**.
- 5) Write into the memory by pressing **MUTING** → then **ENTER**.

H SIZE (HSIZ)

**H.CENTER ADJUSTMENT (H POS)**

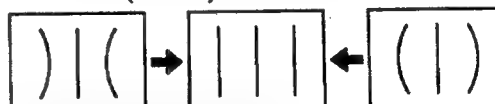
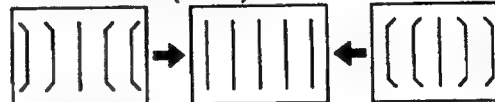
Note: Perform this adjustment after H.FREQUENCY ADJUSTMENT (HFRE).

- 1) Input a color bar signal.
- 2) Set the Service mode.
- 3) Select HSIZ with **[1]** and **[4]**.
- 4) Press **[6]** so that the Horizontal size set to min.
- 5) Adjust A-21 connector position so that both-size blanking width of the Raster should be same on the Scrnne.
- 6) Unplug Set then plug in Set.
- 7) Set to Service mode.
- 8) Select HPOS with **[1]** and **[4]**.
- 9) Adjust **[3]** and **[6]** so that the color bars center should be set to the CRT Screen center position.
- 10) White into the memory by the pressing **MUTING** → then **ENTER**.



PIN AMP (PAMP), CORNER PIN (CPIN) PIN PHASE (PPHA), H TRAPIZOID (HTRA) V LINEARITY (VLIN), V ANGLE (VANG), VS CORRECTION (VSCO), Y BOW (YBOW), V SHIFT (VPOS), AND V COMP (VCOM) ADJUSTMENTS

- 1) Input a cross-hatch signal.
- 2) Press **STANDARD** to normal.
- 3) Set to Service Mode.
- 4) Select PAMP, CPIN, PPHA, H TRA, VPOS, VCOM, LVIN, VANG, VSCO and YBOW with **[1]** and **[4]**.
- 5) Adjust **[3]** and **[6]** to the best picture.
- 6) Write the memory by **MUTING** → **ENTER**.

PIN AMP (PAMP)**CORNER PIN (CPIN)****PIN PHASE (PPHA)****H TRAPIZOIDO (HTRA)**

V-SHIFT (VPOS)



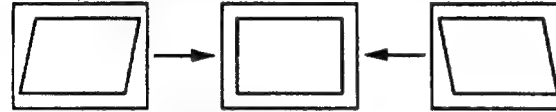
V COMP (VCOM)



V LINEARITY (VLIN)



V ANGLE (VANG)



VS CORRECTION (VSCO)

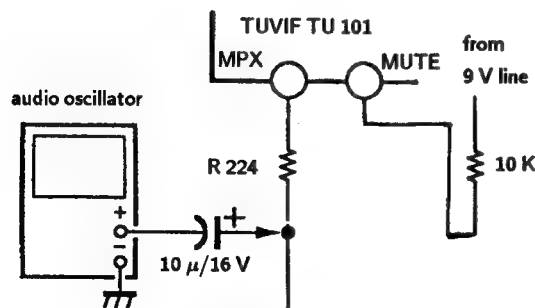


Y BOW (Y BOW)



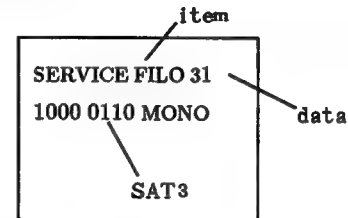
FILTER ADJUSTMENT (MPX, FILO)

- 1) Set to Service Mode.
- 2) Select to **TEST** with **1** and **4**, set the data to "1".
Then select MPX and change data to "08".
- 3) Connect an audio oscillator to R224 using a capacitor (10μF/16V), set frequency to 62.936 kHz ± 0.1 kHz.
And then, through the 10kΩ resistor, feed 9.0V into the mute of TUVIF TU 101.



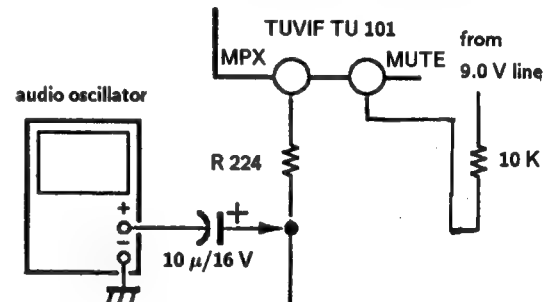
V 4 fh : SINE-WAVE 62.936 KHz ± 0.1 KHz
LEVEL 3.0 Vp-p

- 4) Make the data "00" by selecting FILO with **1** and **4**. And then, send up the data gradually by pressing **6**. Set the data to D1 before SAT3 changing to 1 from 0.
- 5) Send up the data gradually. Set data D2 when SAT3 changes 0 from 1.
- 6) Adjust the data of FILO to $\frac{D1 + D2}{2}$.
- 7) Write into the memory by pressing **MUTING** → then **ENTER**.



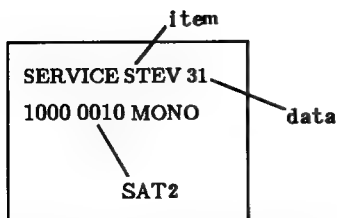
ST VCO ADJUSTMENT (MPX, STEV)

- 1) Set to Service Mode.
- 2) Select TEST with **1** and **4**, set the data to "1".
And then press **MTS** to MONO.
- 3) Select MPX, set the data "8".
- 4) Connect an audio oscillator to R 224 using electrolytic capacitor (10μF/16V) and apply the frequency Vst. Then, apply DC voltage to mute of TUVIF TU 101 using 10kΩ connect to 9.0 V line.



Vfh : SINE-WAVE 15.734 KHz ± 0.1 KHz
LEVEL 0.28 Vp-p

- 5) Select STEV with **1** and **4**, set the data to "00" with **6**. And then, send up the data gradually. Set the data to D1 before SAT2 changes from 0 to 1.
- 6) Send up data gradually, set the data to D2 when SAT2 changes 1 from 0.
- 7) Adjust the data of STEV to
- 8) Write into the memory by pressing **MUTING** → then **ENTER**.

**MPX IN LEVEL ADJUSTMENT (MPX)**

- 1) Set to Service Mode.
- 2) Select TEST with [1] and [4], set the data to "0" with [6]. And then press [MTS] to MONO.
- 3) Select MPX with [1] and [4], set the data to "08" with [3] and [6].
- 4) Write into the memory by pressing [MUTING] → then [ENTER] .

PILOT CANCEL ADJUSTMENT (PILO)

- 1) Set to the Service Mode.
- 2) Select PILO with [1] and [4], set the data to "08" with [3] and [6].
- 3) Write into the memory by pressing [MUTING] → then [ENTER] .

SAP VCO f₀ ADJUSTMENT (SAPV)

- 1) Set to Service Mode.
- 2) Input a stereo broadcast signal with SAP.
- 3) Select TEST with [1] and [4], set the data to "0" . And then, press [MTS] to MAIN.
- 4) Connect a digital multimeter to TP-1(DBX). This voltage reading will equal V 1.
- 5) Press MTS to SAP and this voltage will equal V 2.
- 6) Select SAPV with [1] and [4], adjust [3] and [6] so that $V 2 = V 1 \pm 0.03 \text{ VDC}$.
- 7) Write the memory by [MUTING] → [ENTER] .

SEPARATION ADJUSTMENT (SEP)

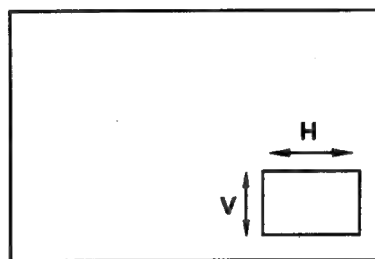
- 1) Set to Service Mode.
- 2) Press [MTS] to MAIN and receive a monoral broadcast signal.

In the next step, receive a stereo broadcast signal.

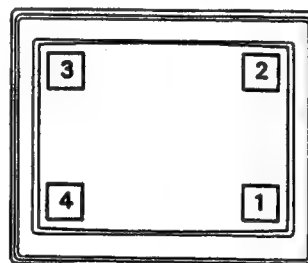
- 3) Select SEP and VD with [1] and [4], adjust [3] and [6] so that a clear stereo sound is effected.

READ DELAY H/V (PHPO, PVPO)

- 1) Input a cross hatch signal.
- 2) Set to service mode.
- 3) Press P/P a display a window picture.
(RIGHT LOWER Position)
- 4) Select PHPO, PVPO with [1] and [4]
- 5) Adjust [3] and [6] to the READ DELAY H/V.
- 6) Write the memory by pressing [MUTING] → then [ENTER] .



Note : Before doing any Service Adjustments on the models above you must make sure that the PIP Screen is in the number 1 position, even if there are no adjustments being made to PIP.

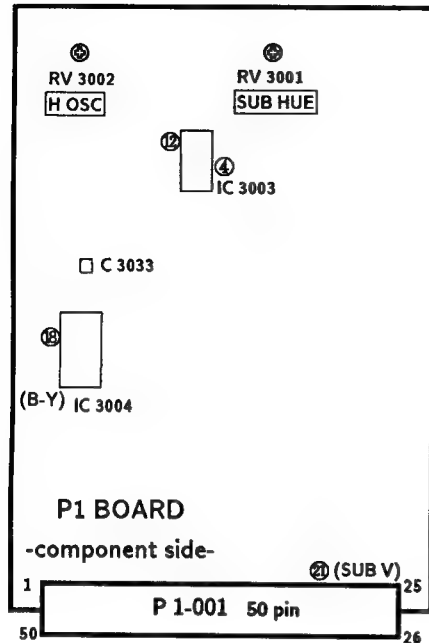


PIP Positions

After making adjustments into the PIP 1 position, write the information into the ROM.

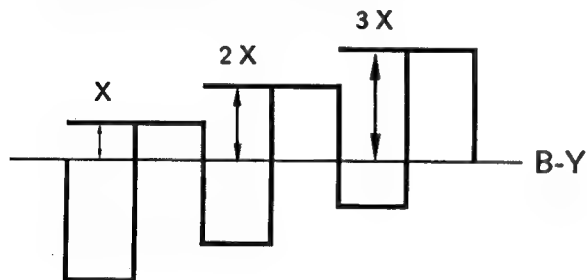
Next, unplug the unit and recheck the other three positions. Adjustments made to the number 1 position will affect the other three positions.

5-3. P1 BOARD ADJUSTMENTS



SUB HUE ADJUSTMENT (RV 3001)

- 1) Set HUE and COLOR to the standard condition.
- 2) Make adjustment so that B-Y signal as shown to the right is obtained at the crossing point of R 3009 (0 Ω) and C 3033.
- 3) Supply the color bar signal of 75 IRE (white) at 2 Vpp to Pin 21 (SUB V) of P 1-001 and make adjustment by turning RV 3001.



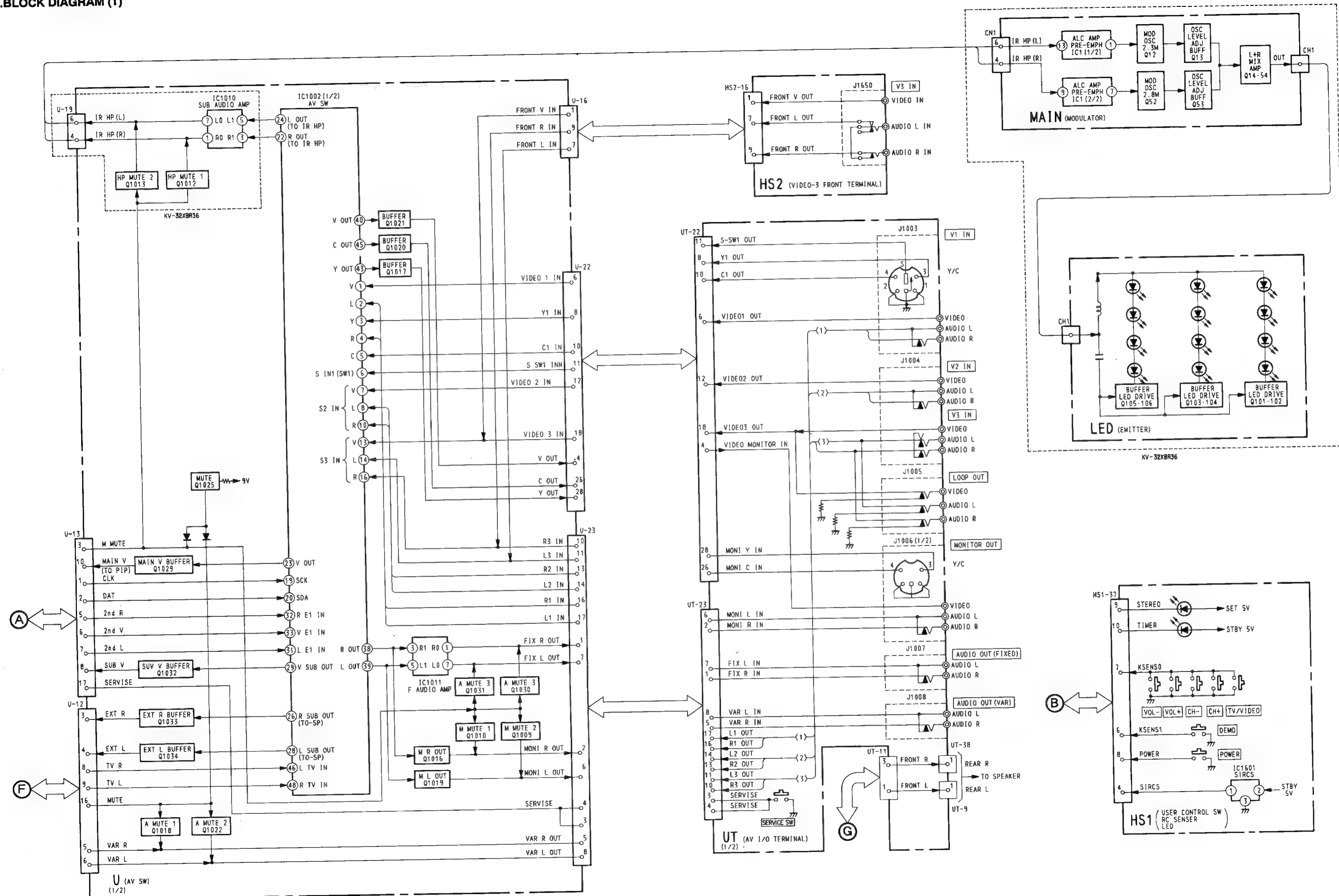
H. FREQUENCY (H OSC) ADJUSTMENT (RV-3002)

- 1) Connect a frequency counter to Pin ④ (H OUT) of IC 3003.
- 2) Connect Pin ⑫ of IC 3003 to ground.
- 3) Adjust RV3002 for a frequency of 15.734 kHz \pm 50 Hz at Pin ④ of IC 3003.
(or until the frequency comes to a standstill.)

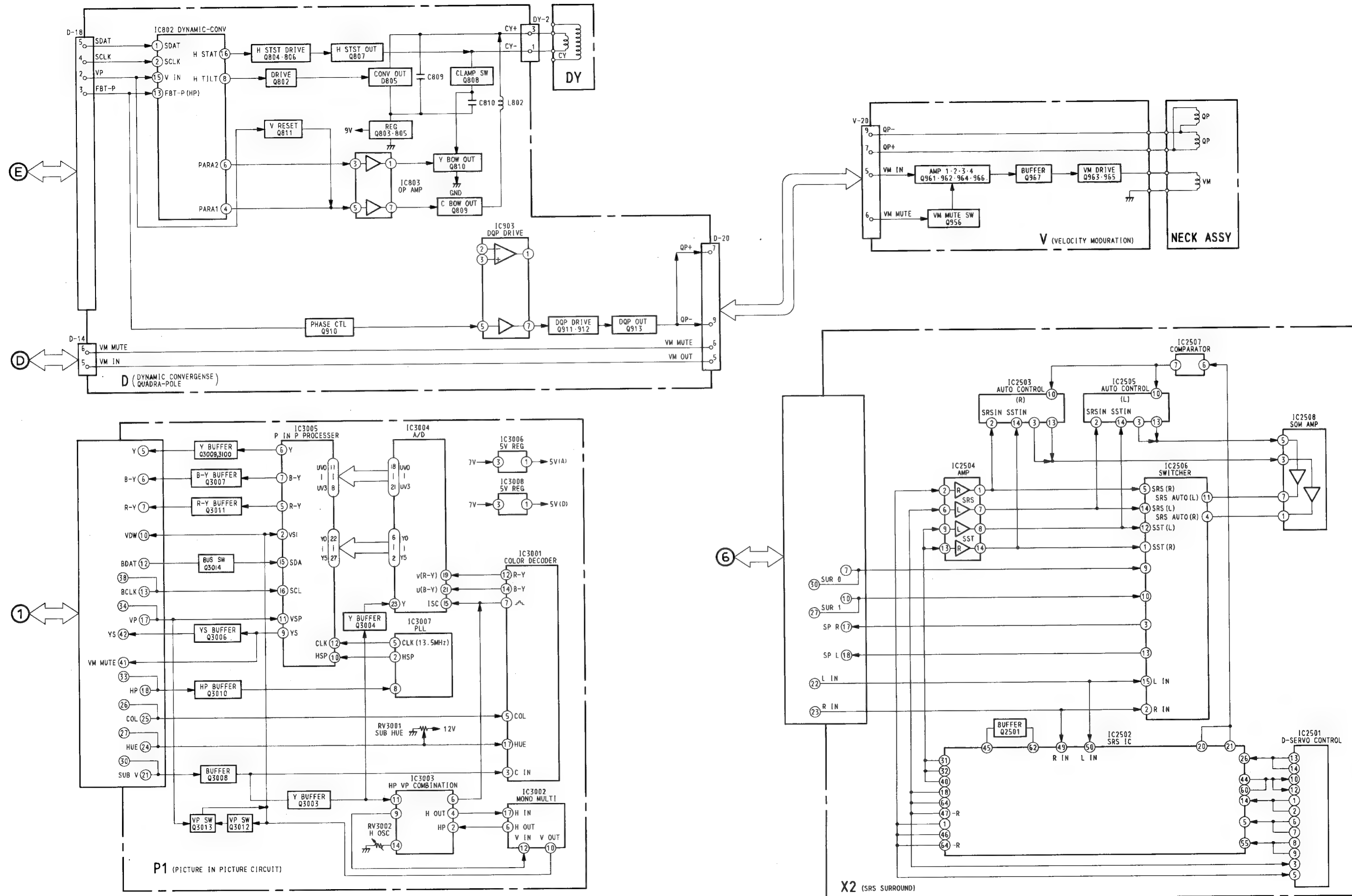
This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECTION 6 DIAGRAMS

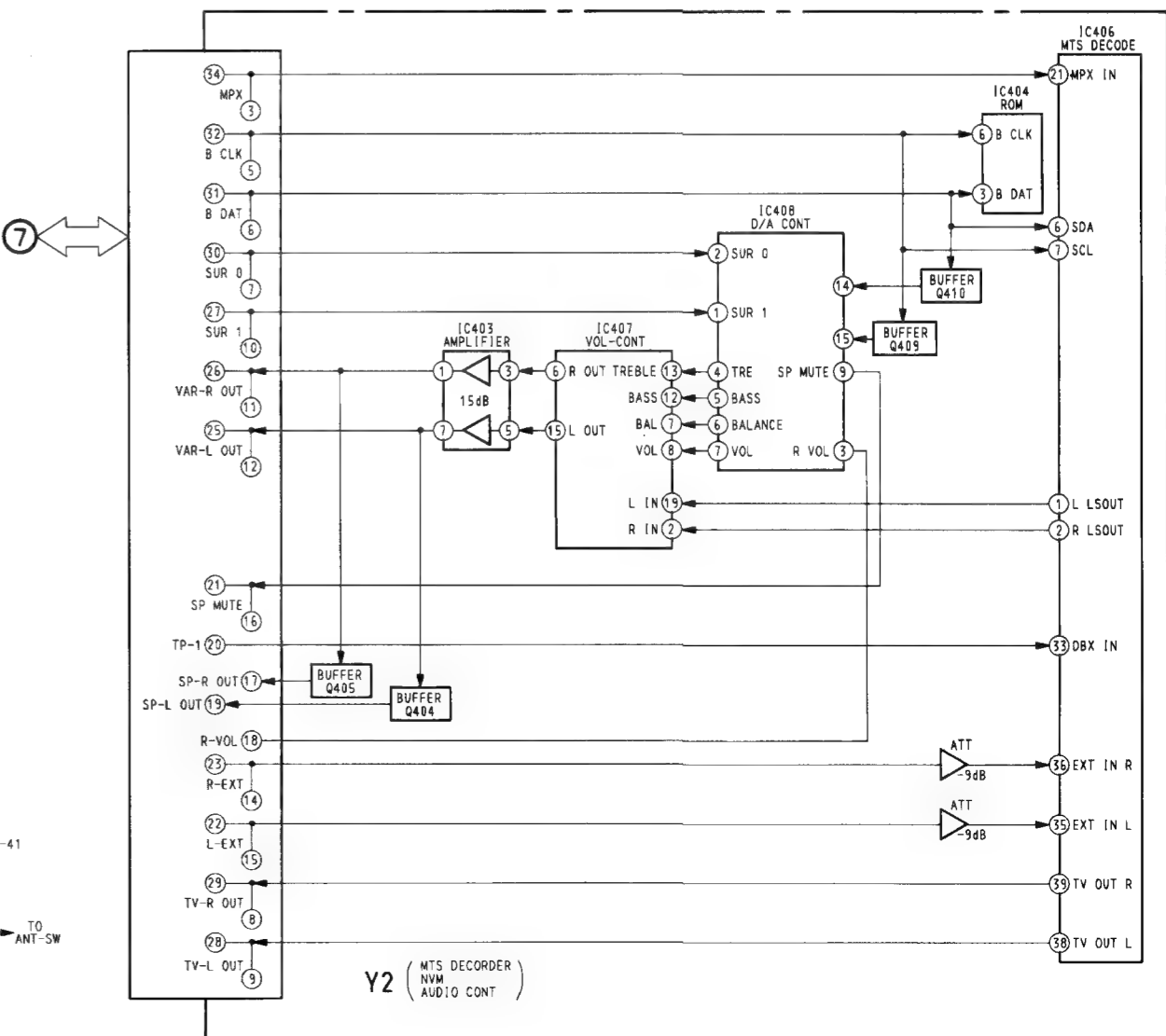
6-1.BLOCK DIAGRAM (1)



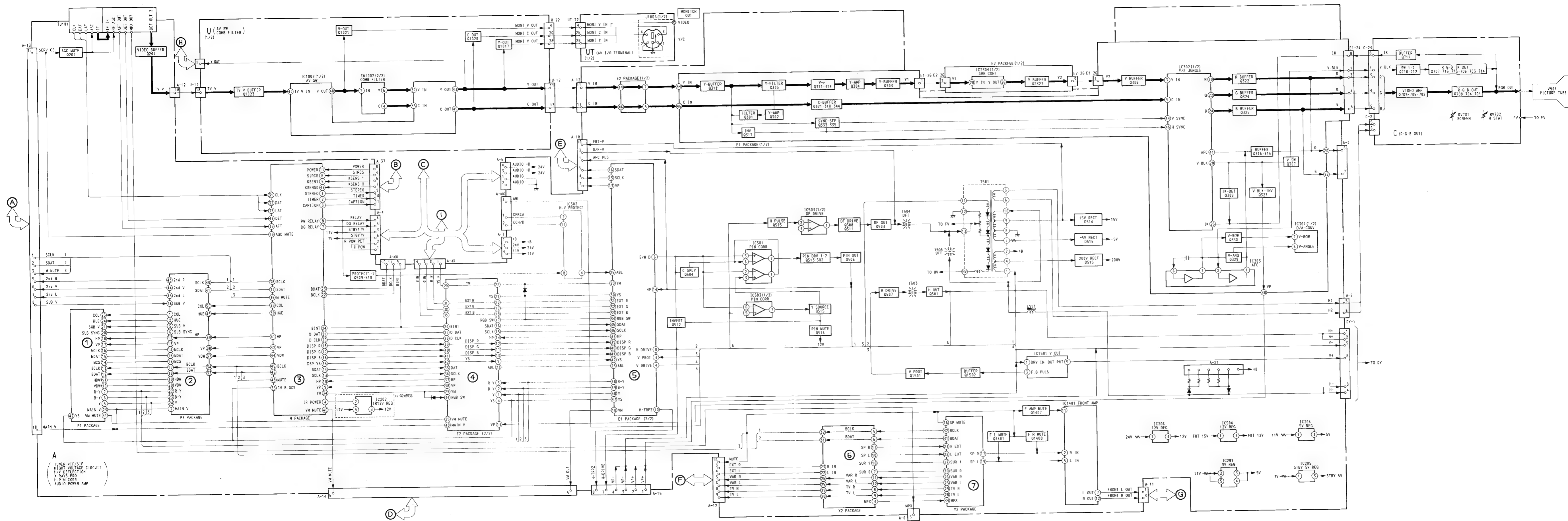
6-2.BLOCK DIAGRAM (2)



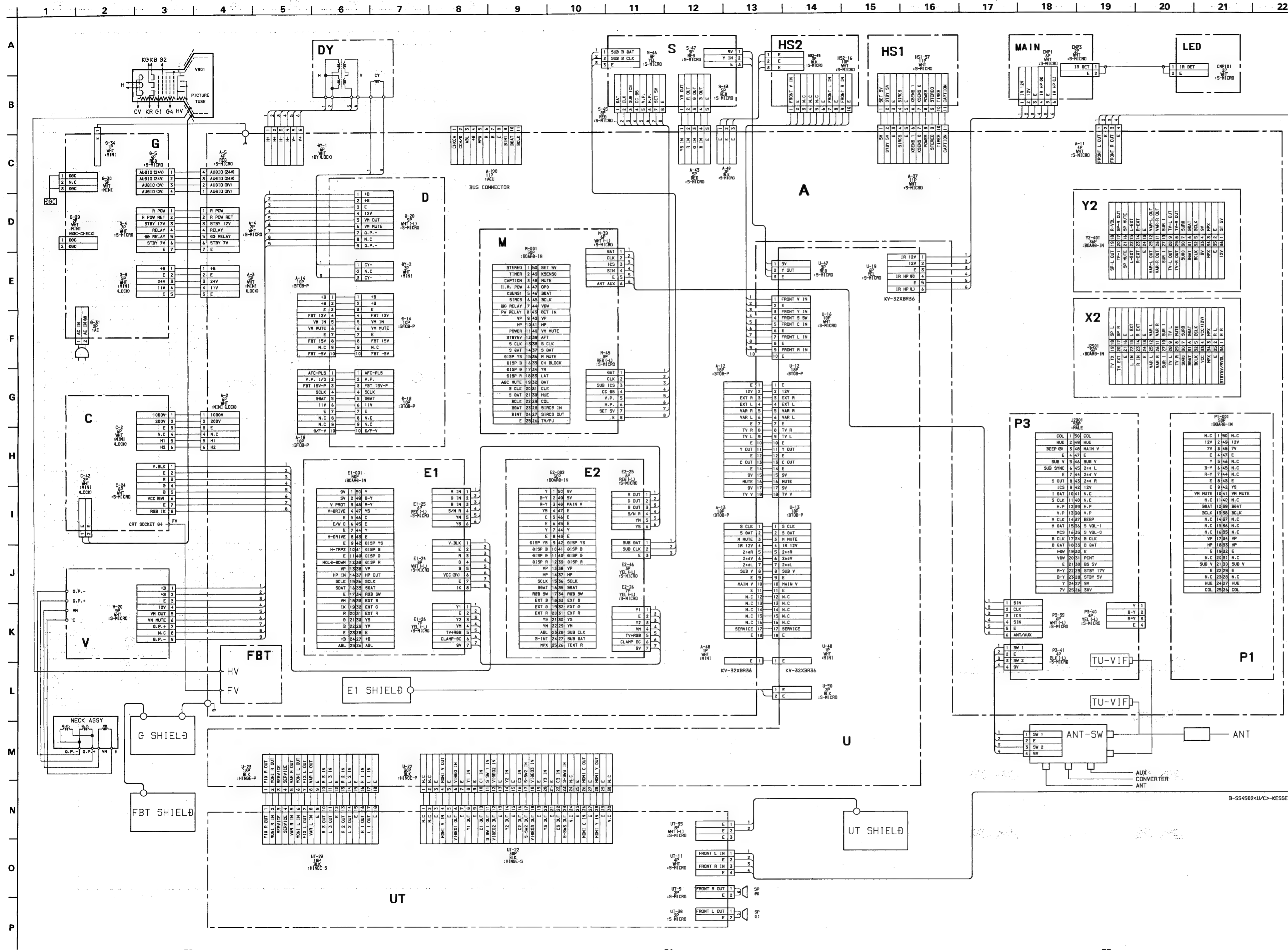
— 70 —



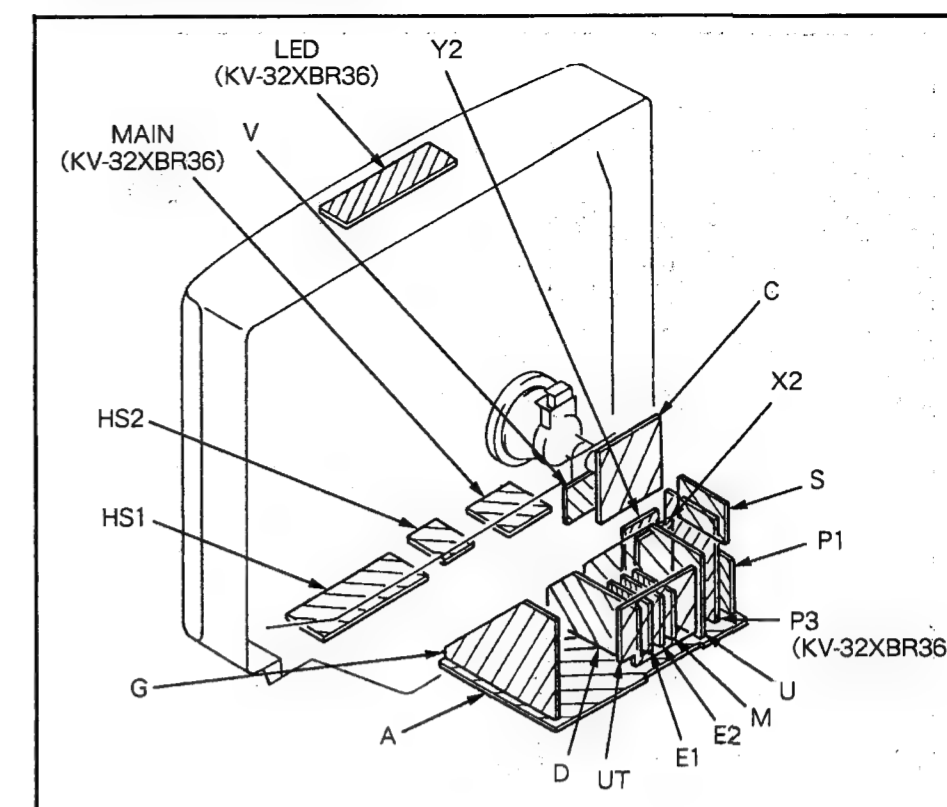
6-4.BLOCK DIAGRAM (4)



6-5.FRAME SHEMATIC DIAGRAM



6-6.CIRCUIT BOARDS LOCATION



6-7.SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
- pF: μF 50WV or less are not indicated except for electrolytic and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
- $K\Omega = 1000\Omega$, $M\Omega = 1000K\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4W

- Chips resistors are 1/10W.
- : nonflammable resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- : earth-chassis.
- The components identified by \blacksquare in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
- Should replacement be required, replace only with the value originally used.
- When replacing components identified by \blacksquare mark the necessary adjustments indicated. If results do not meet the specified value, change the component identified by \blacksquare and repeat the adjustment until the specified value is achieved.
- (Refer to R565 and R566 on page 52-54 in the Service Manual.)
- When replacing the part in below table be sure to perform the related adjustment.

- Readings are taken with a color-bar signal input.
- Readings are taken with a 10 M Ω digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerance.
- All voltages are in V.
- : B+ bus.
- : B-bus.
- : signal path.

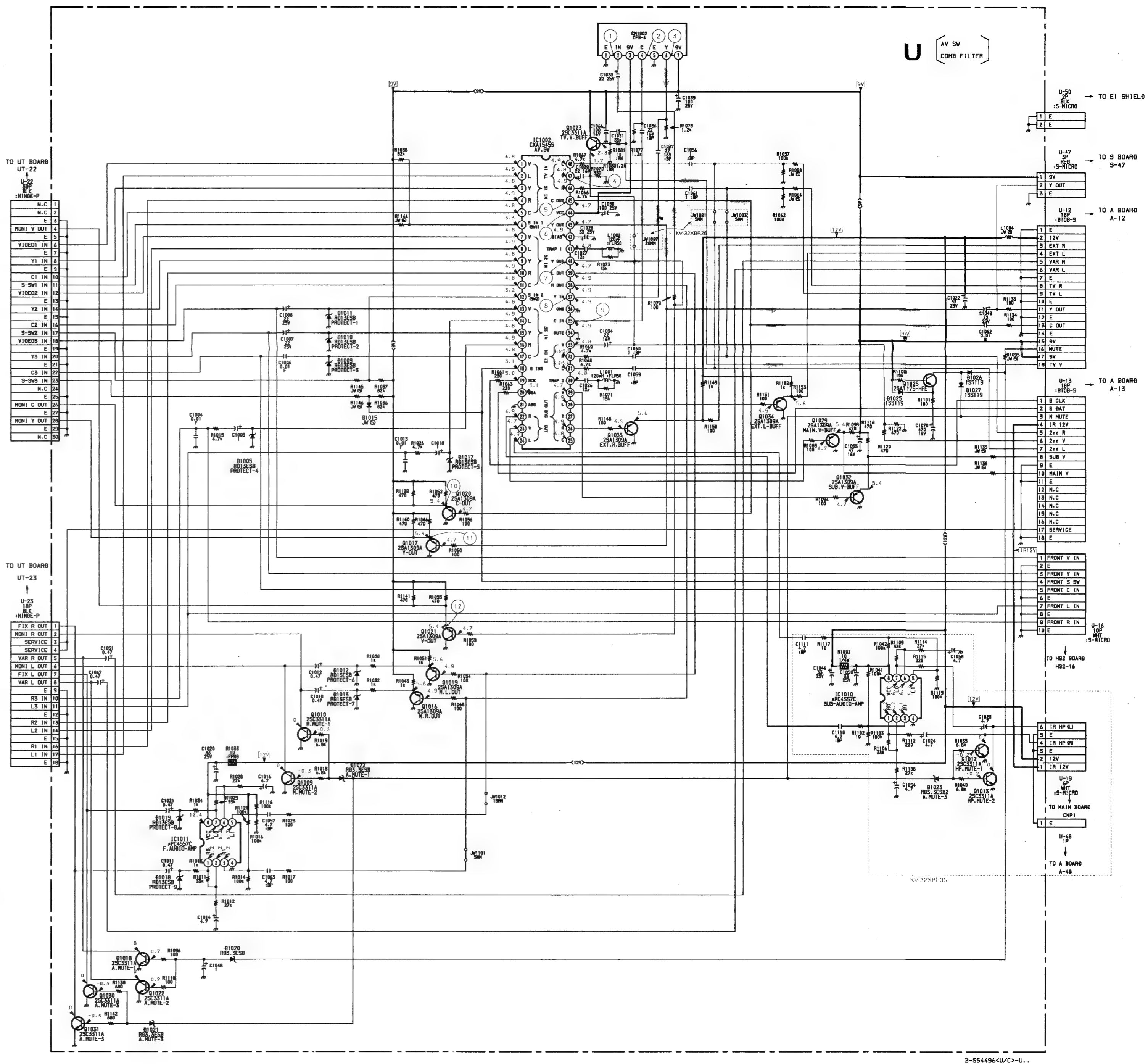
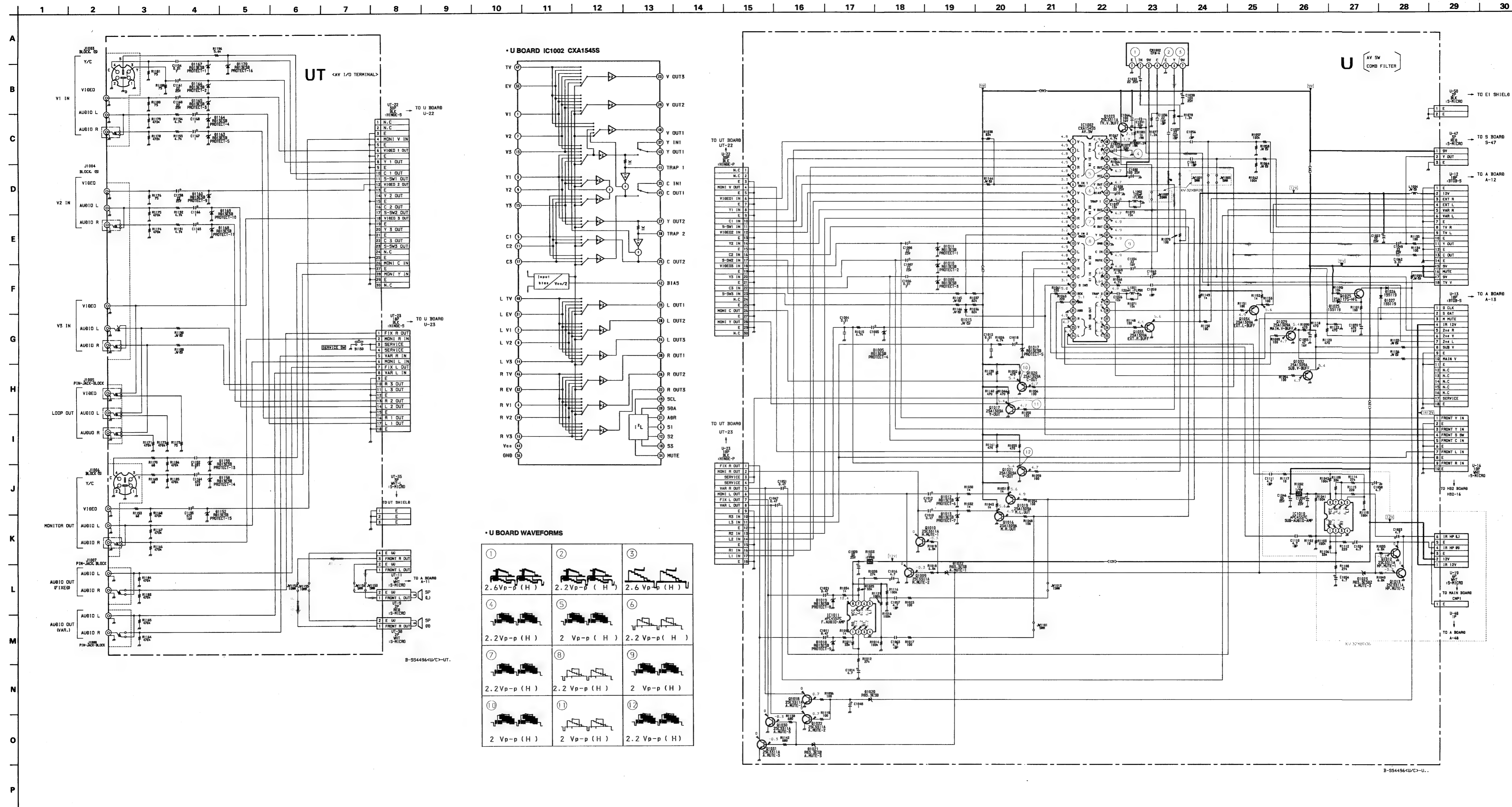
Reference information

RESISTOR	RC	METAL FILM
RESISTOR	RC	SOLID
RESISTOR	FPRD	NONFLAMMABLE CARBON
RESISTOR	FUSE	NONFLAMMABLE FUSIBLE
RESISTOR	RW	NONFLAMMABLE WIREWOUND
RESISTOR	RS	NONFLAMMABLE METAL OXIDE
RESISTOR	RB	NONFLAMMABLE CEMENT
RESISTOR	※	ADJUSTMENT RESISTOR
COIL	LF-BL	MICRO INDUCTOR
CAPACITOR	TA	TANTALUM
CAPACITOR	PS	STYROL
CAPACITOR	PP	POLYPROPYLENE
CAPACITOR	PT	MYLAR
CAPACITOR	MPP	METALIZED POLYPROPYLENE
CAPACITOR	ALB	BIPOLAR
CAPACITOR	ALT	HIGH TEMPERATURE
CAPACITOR	ALR	HIGH RIPPLE

Note: The components identified by shading and Δ are critical for safety. Replace only with part number specified.

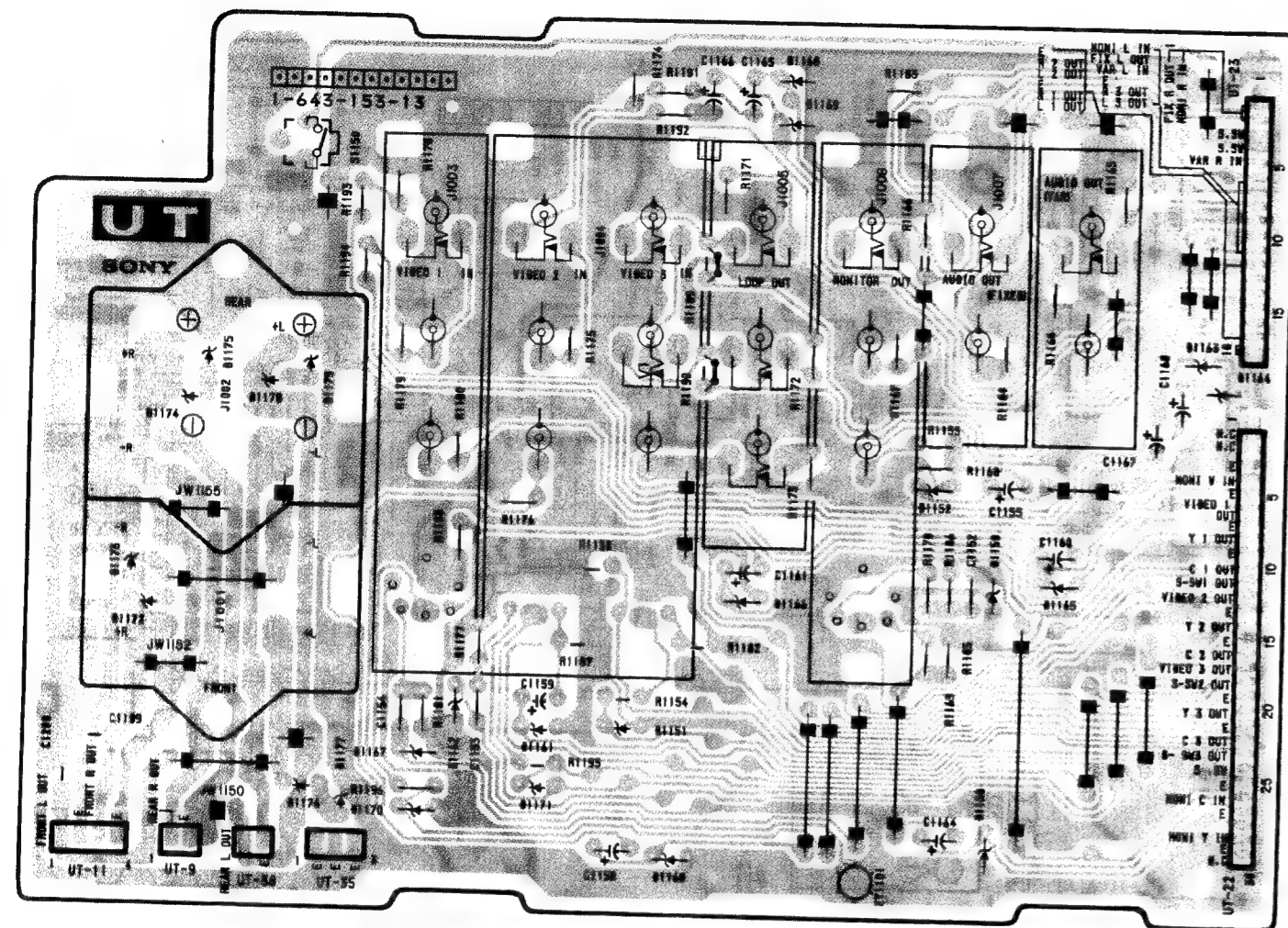
Note: Les composants identifiés par une trame et Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

Part replaced (■)	Adjustment (Δ)
IC502, Q509, Q510, R565, R567, R568, R569 A BOARD	R565 (HOLD-DOWN)
IC502, Q509, Q510, D502, CS31, R554, R566, R567, R568, R569, R1506, T501 A BOARD	R566 (HOLD-DOWN)
IC651, R651 G BOARD	



UT [AV I/O TERMINAL] U [AV SW, COMB FILTER]

- UT BOARD -



KV-32XBR26/32XBR36
RM-Y112A TDR-IF310/RM-Y113A

KV-32XBR26/32XBR36
RM-Y112A TDR-IF310/RM-Y113A

- U BOARD -



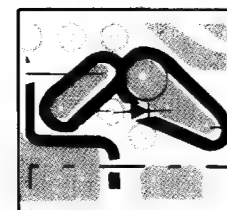
KV-32XBR26/32XBR36
RM-Y112A TDR-IF310/RM-Y113A

IC	
IC1002	B-3
IC1010	E-4
IC1011	F-2
TRANSISTOR	
Q1009	D-2
Q1010	E-2
Q1012	G-3
Q1013	G-4
Q1016	E-3
Q1017	B-5
Q1018	E-2
Q1019	E-3
Q1020	B-5
Q1021	B-2
Q1022	E-1
Q1023	C-2
Q1025	G-2
Q1029	B-2
Q1030	D-2
Q1031	E-2
Q1032	C-4
Q1033	E-2
Q1034	G-2
DIODE	
D1005	A-2
D1009	B-4
D1010	A-4
D1011	B-3
D1012	D-3
D1013	E-3
D1014	A-2
D1015	B-4
D1017	B-2
D1018	G-2
D1019	G-2
D1020	E-2
D1021	E-3
D1022	E-3
D1023	E-3
D1025	G-2
D1026	G-2
D1027	E-3

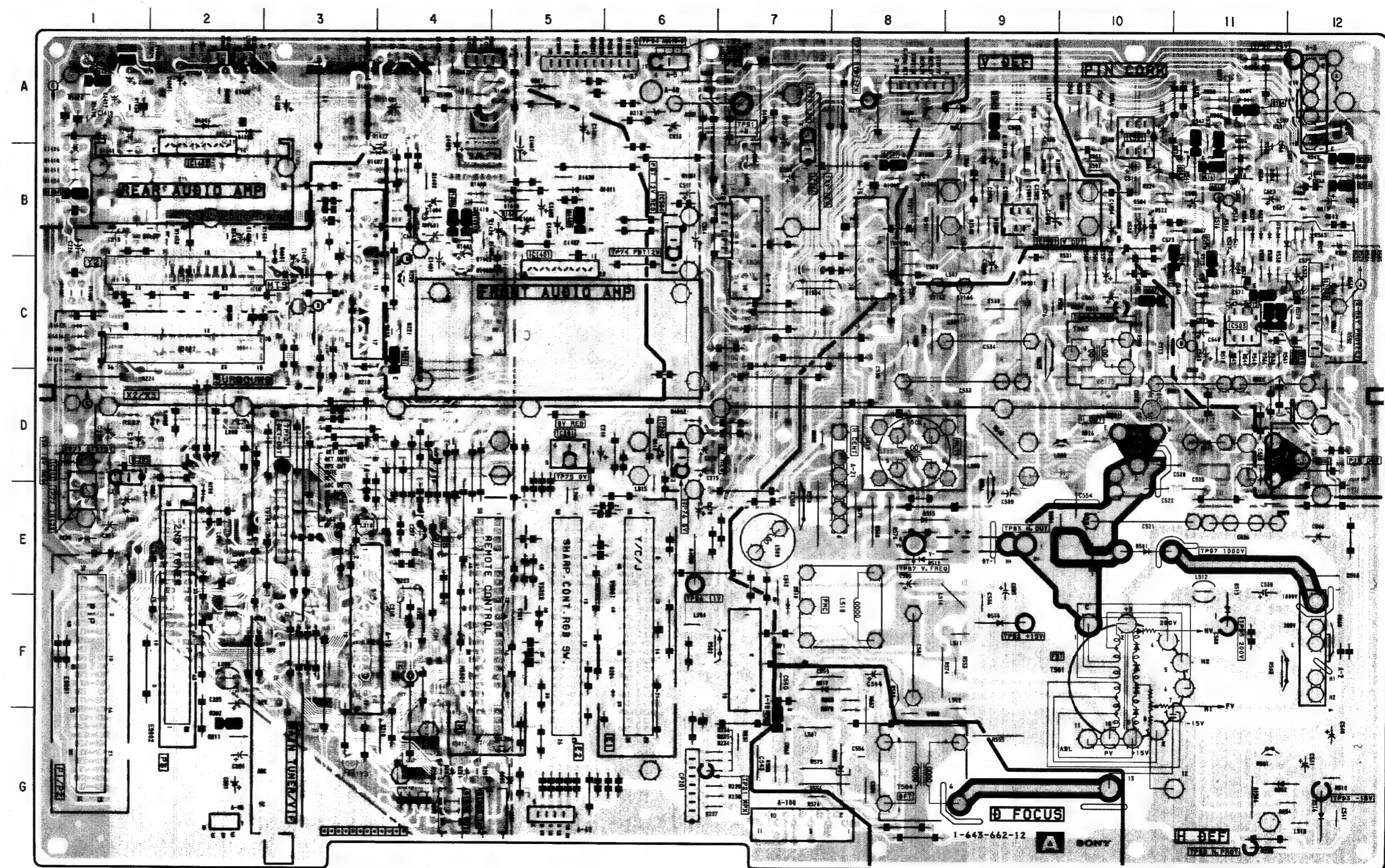
A TUNER - VIF/SIF, HIGH VOLTAGE CIRCUIT,
H/V DEFLECTION, X - RAYS. PROT. H. PIN
CORR. AUDIO POWER AMP.

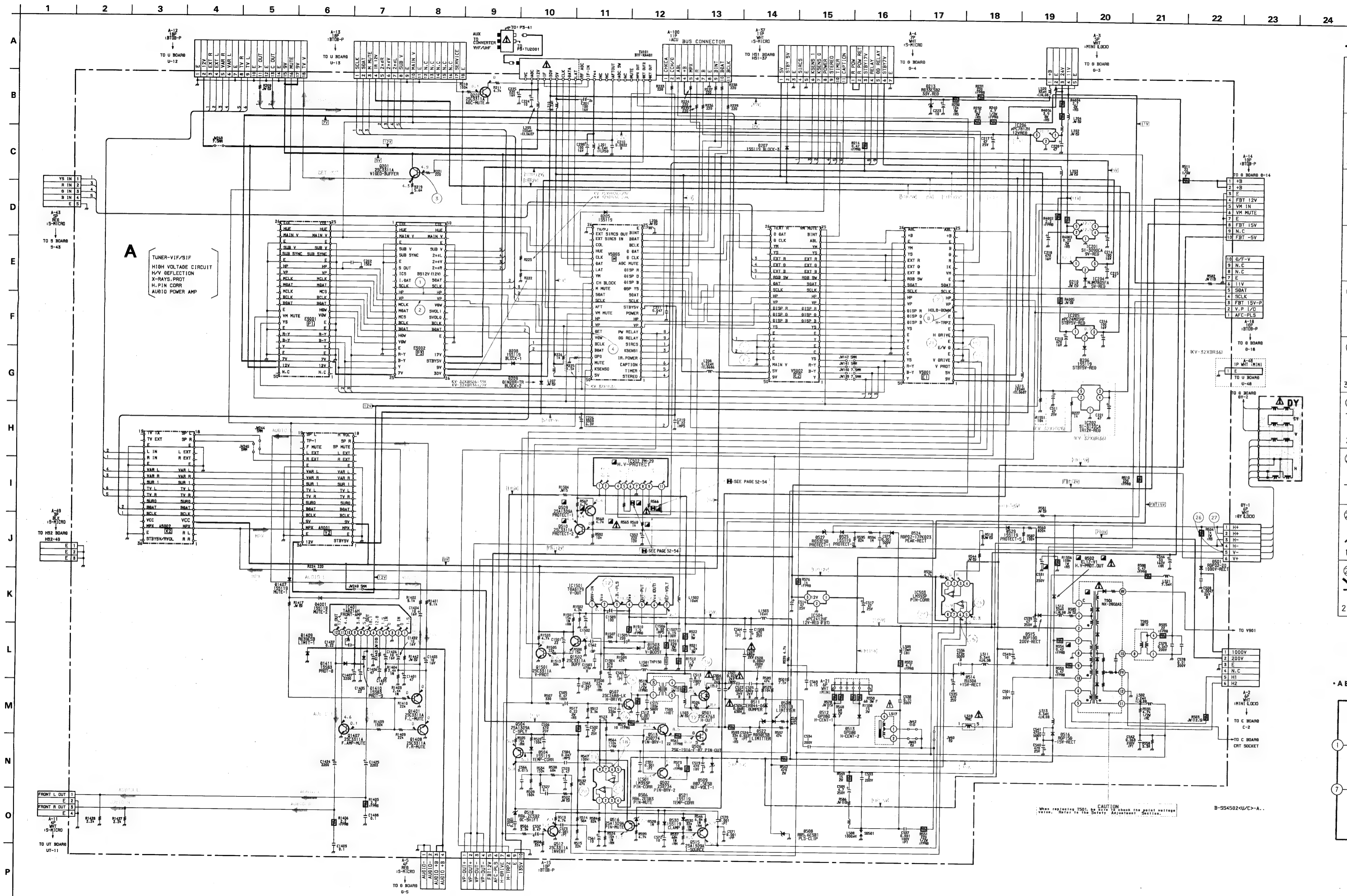
- A BOARD -

IC		D207	A-5
IC201	D-5	D208	E-2
IC202	D-1	D209	E-1
IC204	D-6	D213	A-6
IC205	D-1	D501	E-10
IC206	B-7	D502	G-11
IC501	A-10	D503	G-8
IC502	C-12	D504	A-11
IC503	C-11	D506	A-11
IC504	B-6	D508	C-11
IC1401	C-5	D509	A-8
IC1501	B-9	D510	F-7
TRANSISTOR		D511	D-11
Q201	C-4	D512	E-8
Q202	G-2	D513	E-8
Q501	D-10	D514	F-9
Q502	A-11	D515	F-11
Q503	G-7	D516	G-12
Q504	A-11	D517	F-7
Q505	B-11	D518	B-11
Q506	D-12	D521	B-11
Q507	C-10	D522	B-10
Q508	C-11	D524	B-11
Q509	B-12	D525	B-12
Q510	B-12	D527	B-12
Q511	C-11	D529	B-11
Q512	B-10	D530	B-11
Q513	A-11	D1407	B-3
Q515	C-11	D1408	C-1
Q516	B-11	D1409	A-4
Q1401	B-4	D1410	B-5
Q1407	B-5	D1411	B-5
Q1408	B-4	D1412	C-1
Q1501	B-8	D1413	C-1
Q1502	A-9	D1414	C-1
DIODE		D1503	B-10
D205	G-5	D4001	B-3
D206	E-1		

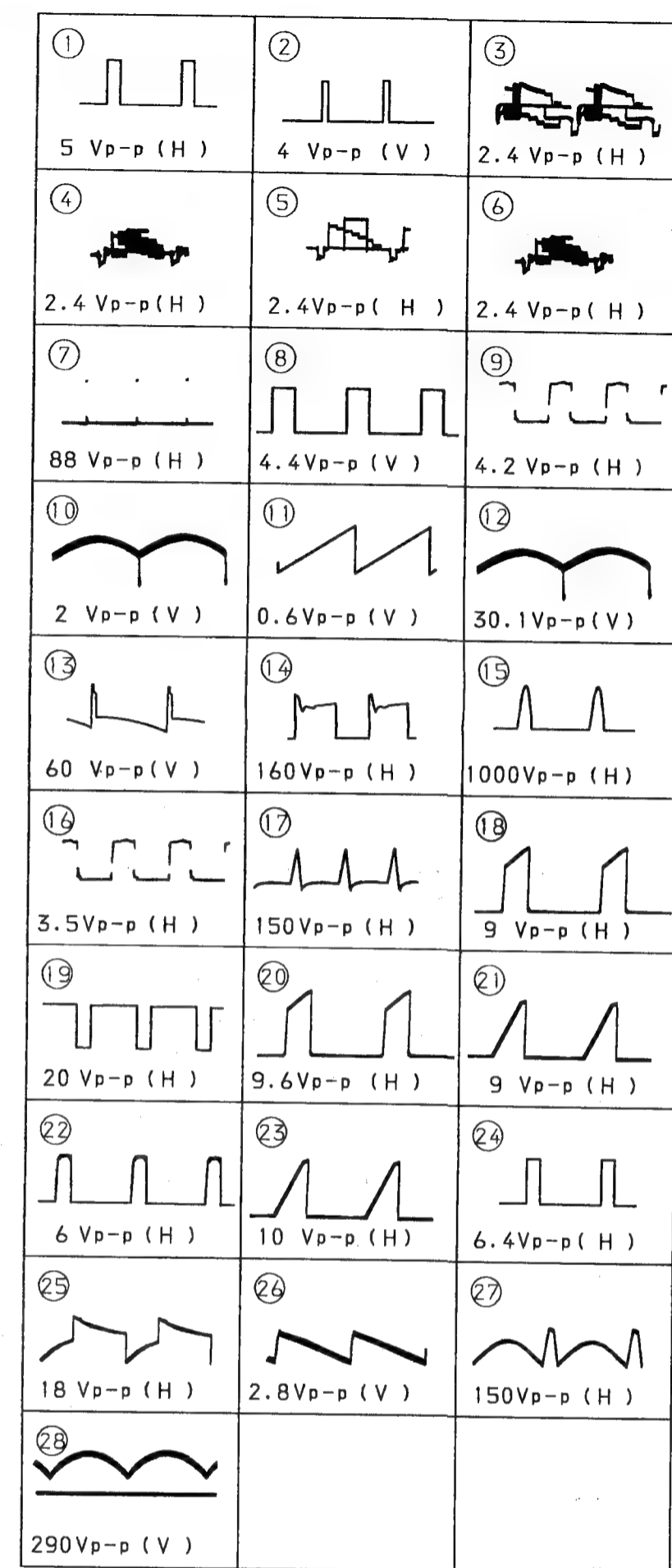


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

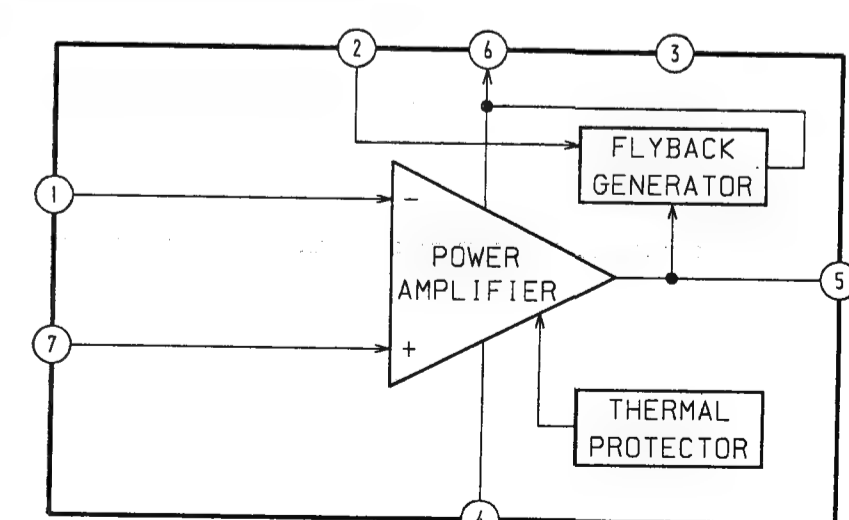


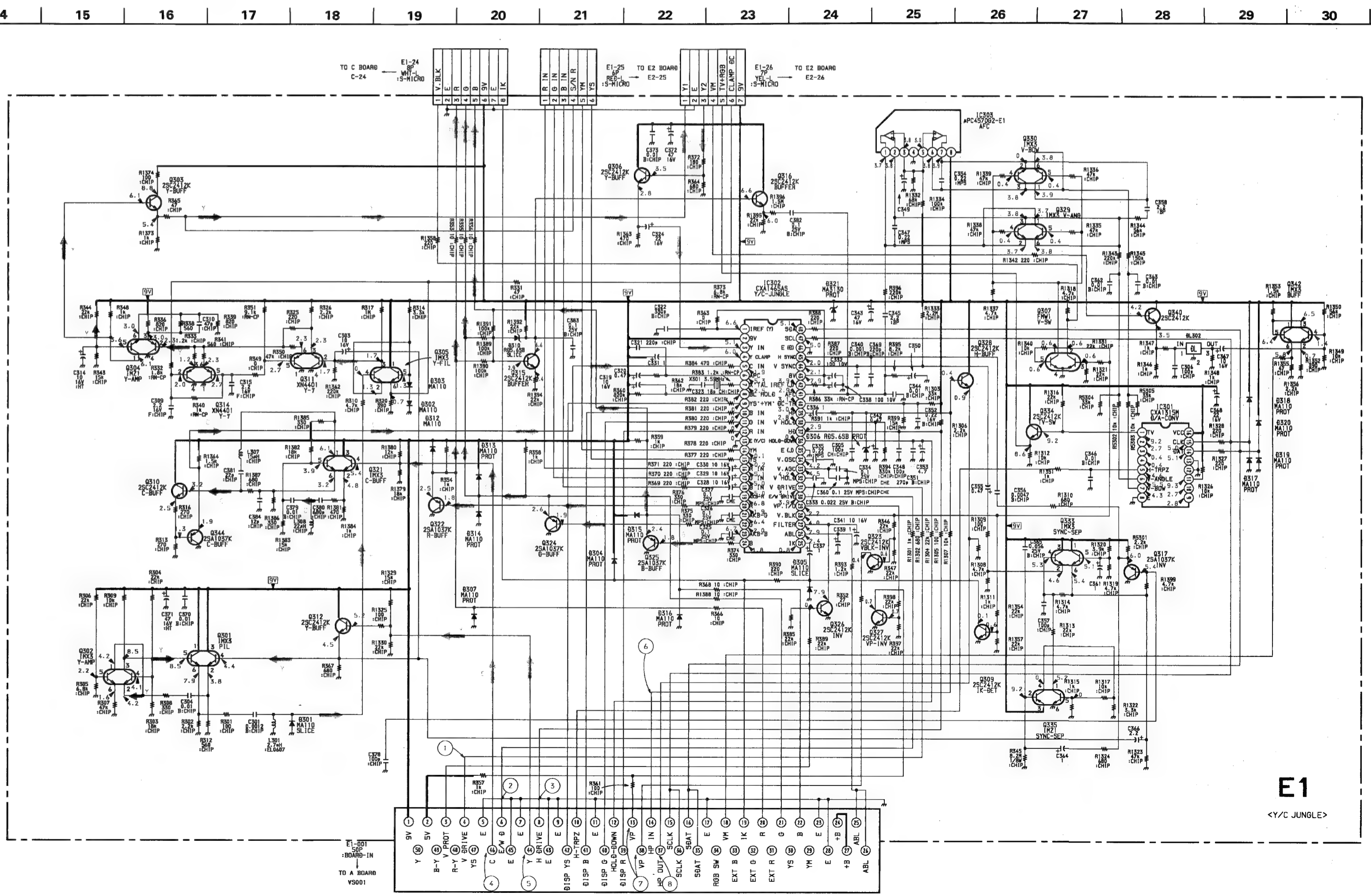
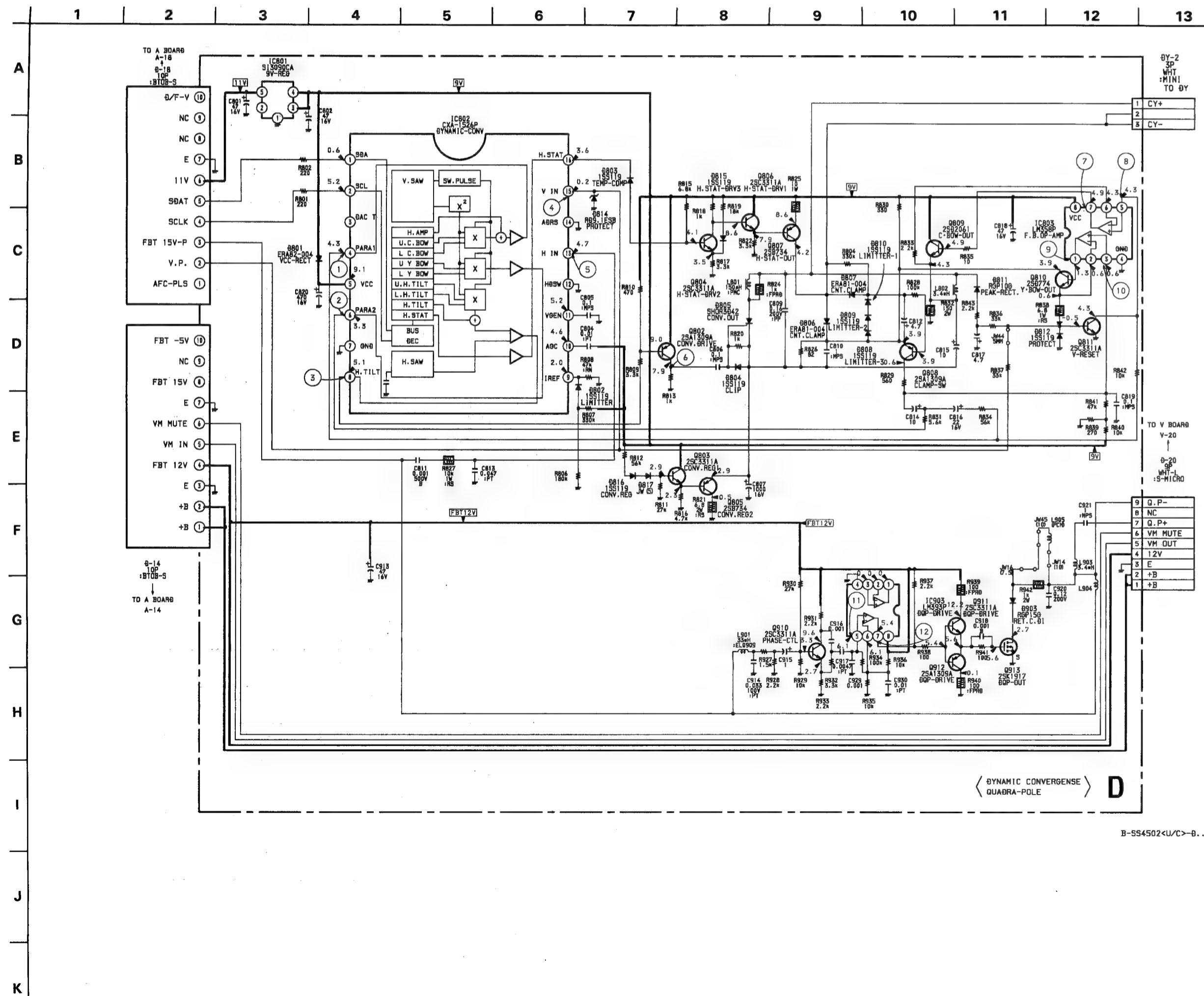
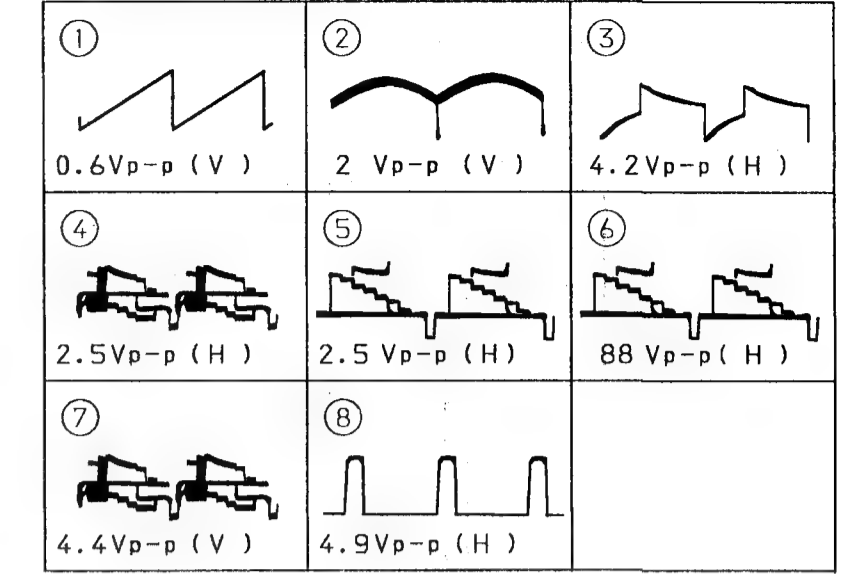
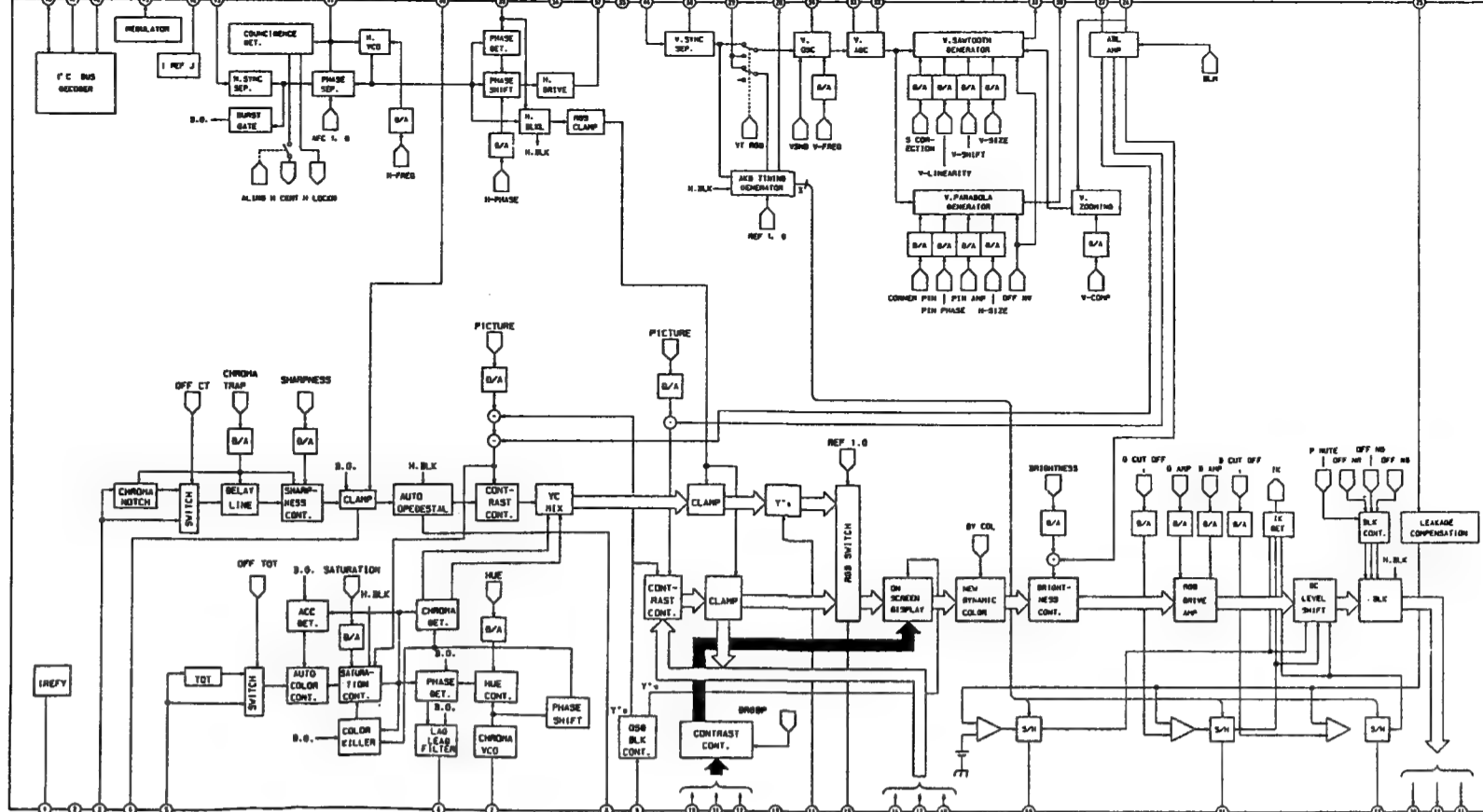
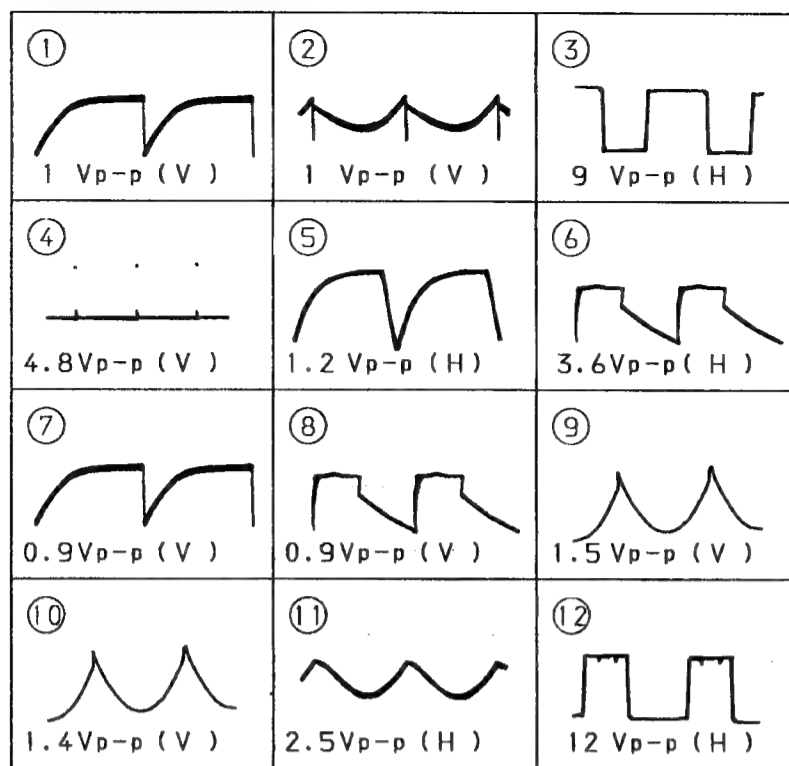
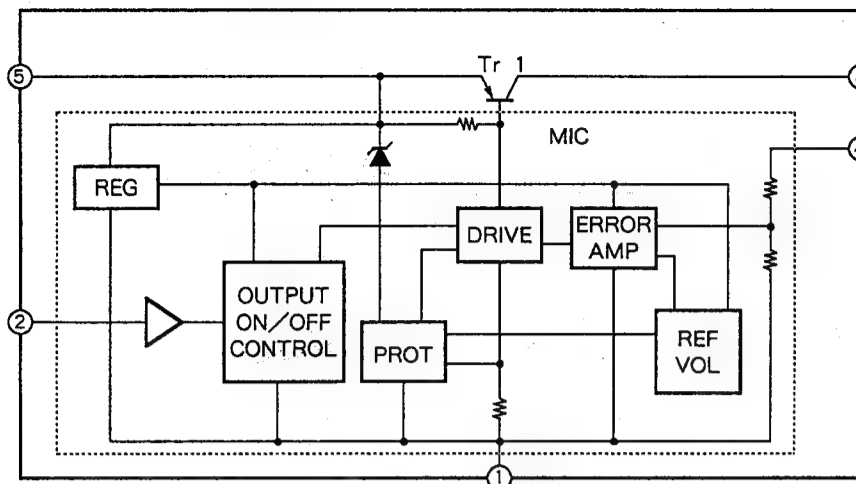


• A BOARD WAVEFORMS



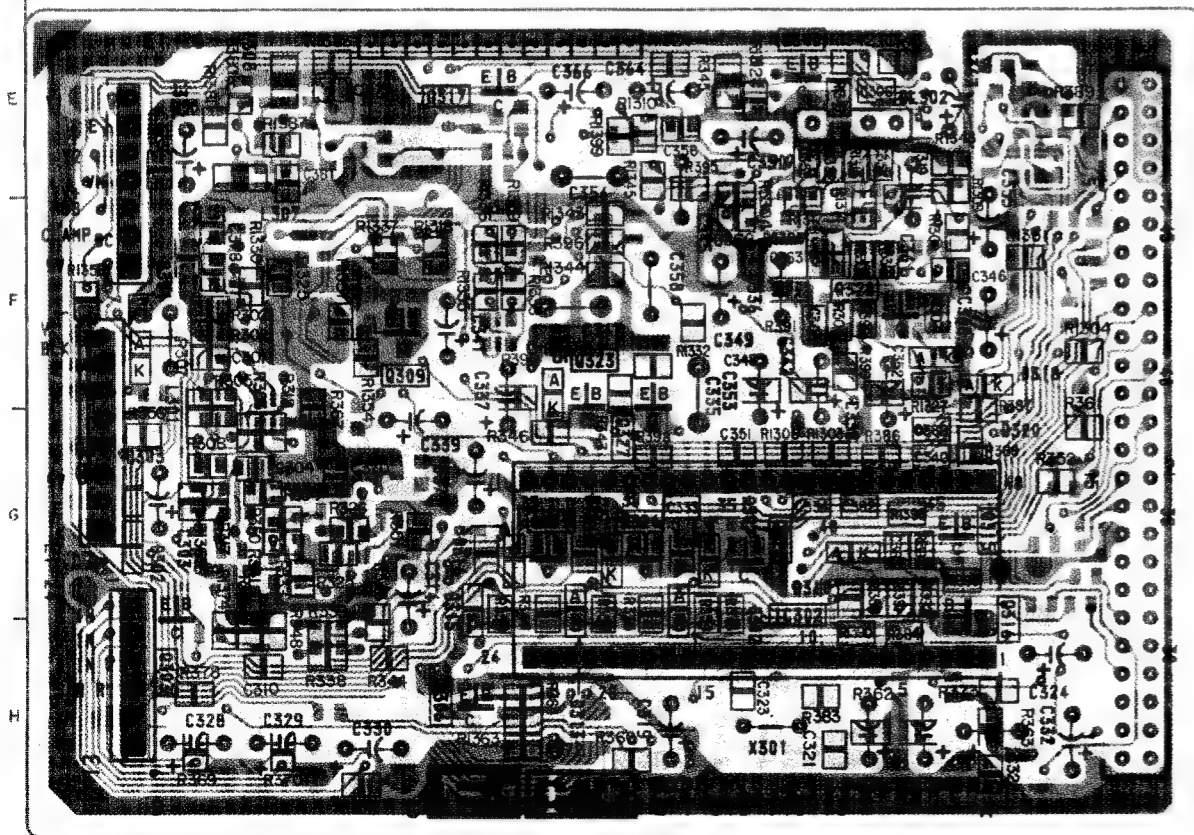
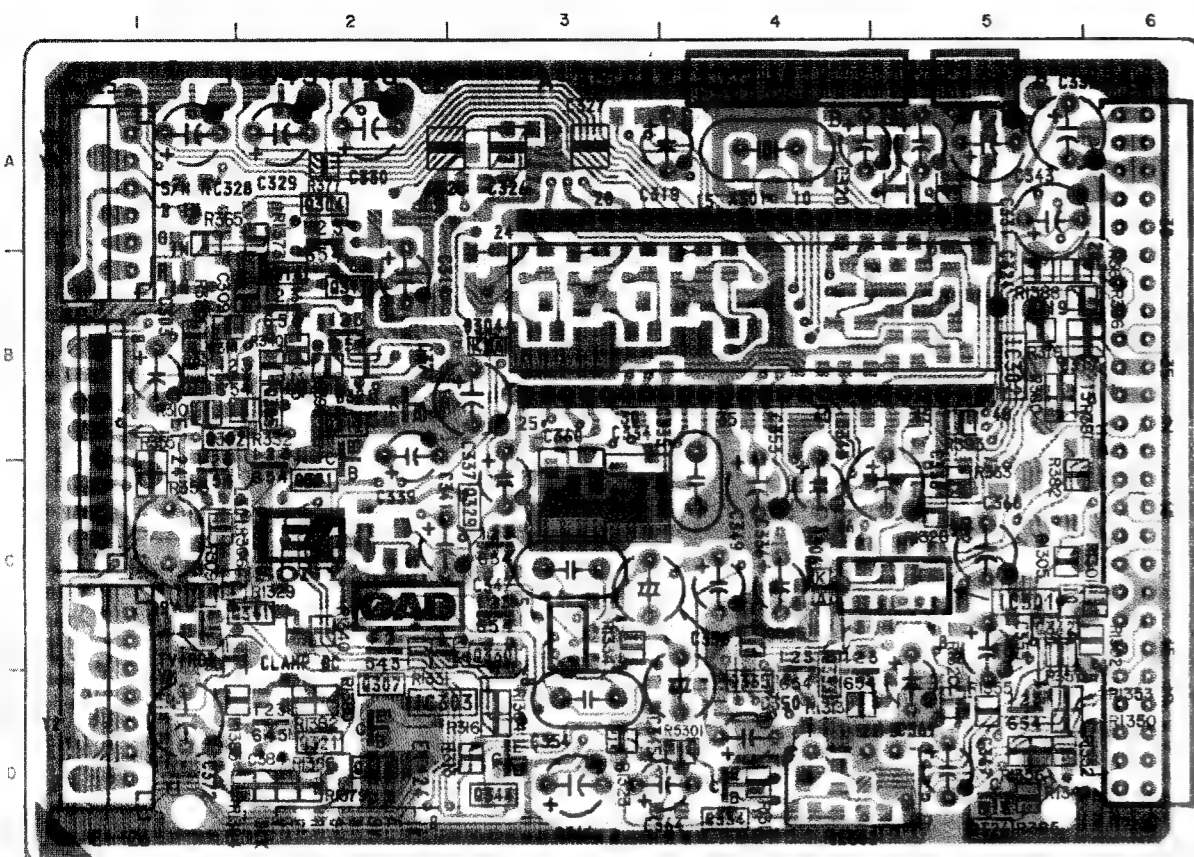
• A BOARD IC1501 TDA8179





E1 [Y/C JUNGLE] **D** [DYNAMIC CONVERGENSE]
[QUADRA - POLE]

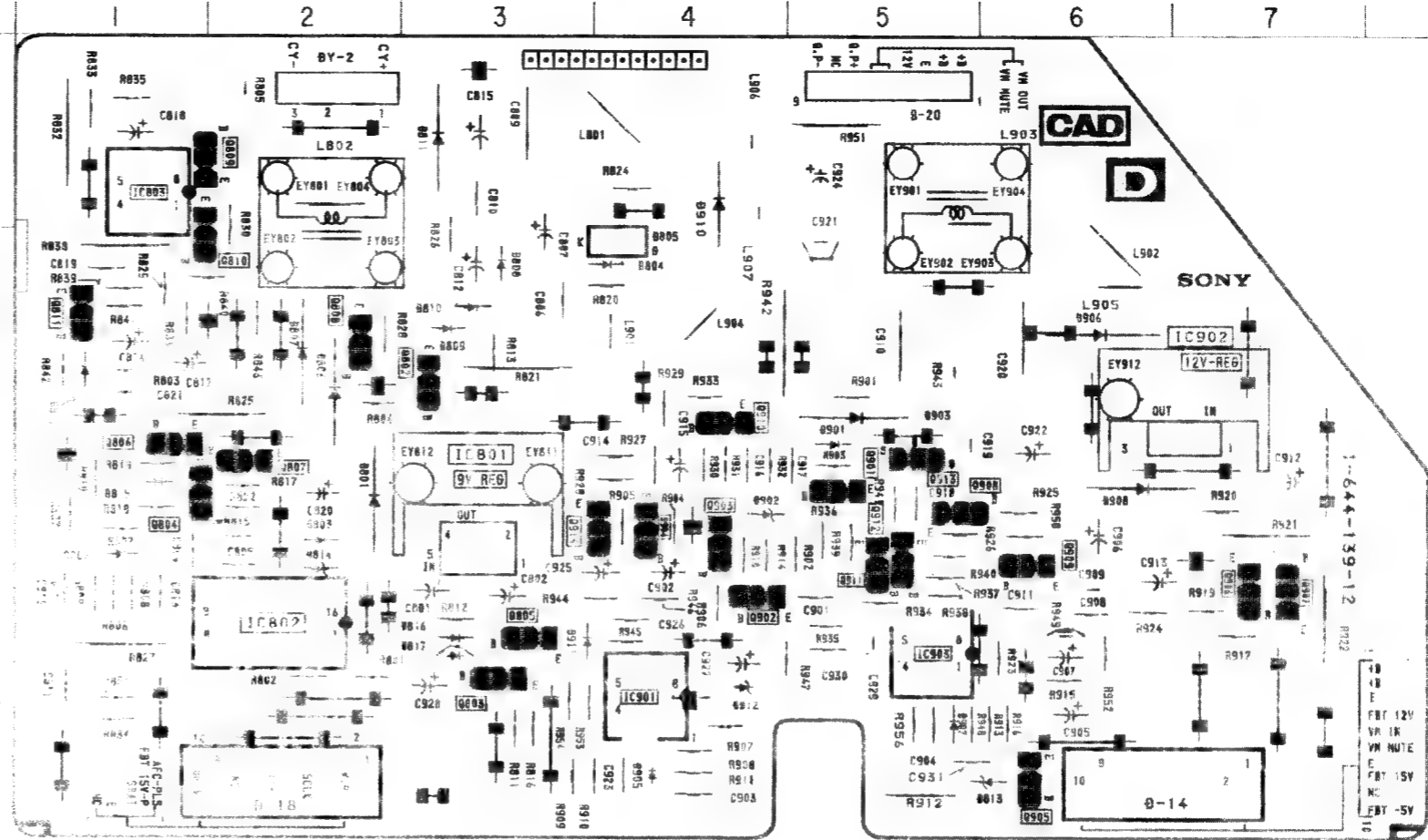
- E1 BOARD -



IC		DIODE	
IC301	C-5	D301	F-1
IC302	B-4, G-4	D302	G-1
IC303	C-3	D303	G-1
TRANSISTOR		D304	B-3
Q301	C-2	D305	F-3
Q302	C-1	D306	C-4
Q303	G-1	D307	G-4
Q304	A-2	D310	G-4
Q305	B-1	D312	G-4
Q306	H-3	D313	G-3
Q307	C-2	D314	G-3
Q309	F-2	D315	G-2
Q310	D-2	D316	G-3
Q311	B-2	D317	B-5
Q312	B-2	D318	F-5
Q314	B-2	D319	B-5
Q315	G-5	D320	G-5
Q316	G-5	D321	B-2
Q317	E-3		
Q321	D-2		
Q322	G-4		
Q323	F-3		
Q324	G-3		
Q325	G-3		
Q326	D-5		
Q327	G-3		
Q328	F-5		
Q329	C-3		
Q330	C-3		
Q333	D-4		
Q334	D-4		
Q335	D-4		
Q340	E-4		
Q342	D-5		
Q344	D-3		

Note :
• : Pattern from the front side of the board.
• : Pattern of the rear side.

- D BOARD -

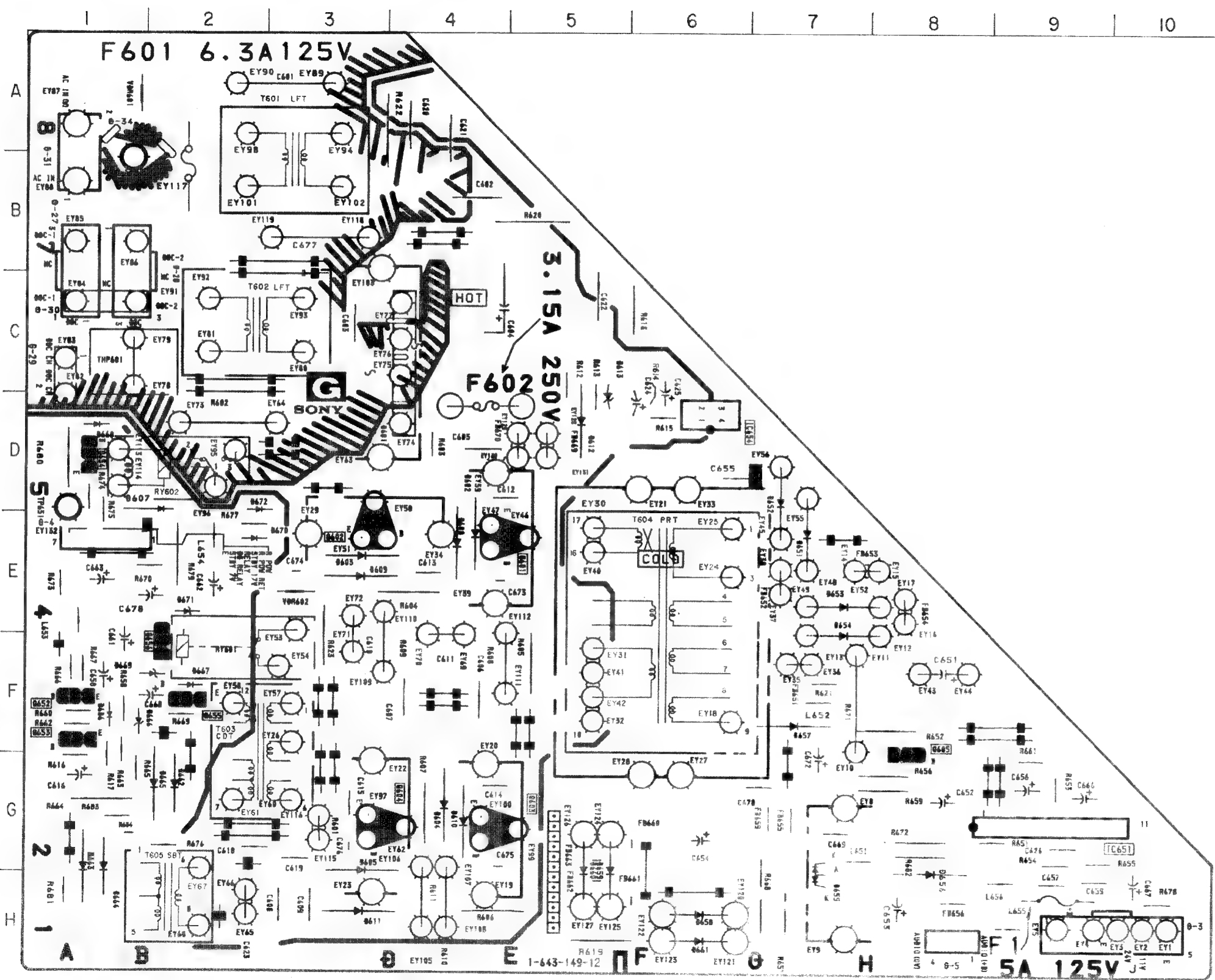


IC		DIODE	
IC802	D-2	D801	C-2
IC803	A-1	D802	C-1
IC903	D-5	D803	C-2
TRANSISTOR		D804	B-4
Q802	B-3	D805	B-4
Q803	D-4	D806	B-2
Q804	C-1	D807	B-2
Q805	D-3	D808	B-3
Q806	C-1	D809	B-3
Q807	C-2	D810	B-3
Q808	B-2	D811	A-3
Q809	A-1	D812	B-1
Q810	B-2	D813	D-6
Q811	B-1	D814	C-2
Q910	B-4	D815	C-1
Q911	C-5	D816	D-3
Q912	C-5	D903	B-5
Q913	C-5		

G [POWER SUPPLY, DEGAUSSING CIRCUIT] **E2** [SHARPNESS CONT. CHARACTER GENERATOR]

- G BOARD -

IC		D613	D-5
IIC651	G-9	D651	E-7
IC654	D-6	D652	D-7
TRANSISTOR		D653	E-7
Q601	E-5	D654	F-7
Q602	E-3	D655	H-7
Q603	G-5	D656	H-8
Q604	G-4	D657	F-7
Q605	F-8	D658	H-6
Q652	F-1	D659	G-5
Q653	F-1	D660	G-5
Q654	D-1	D661	H-6
Q655	F-2	D663	G-1
Q656	F-2	D665	G-2
DIODE		D666	F-1
D601	C-4	D667	F-2
D602	E-4	D668	D-1
D603	E-3	D669	F-2
D604	G-4	D670	E-2
D605	G-3	D671	E-2
D606	F-1	D672	D-2
D607	D-2		
D608	E-4		
D609	E-3		
D610	G-4		
D611	H-3		
D612	D-5		

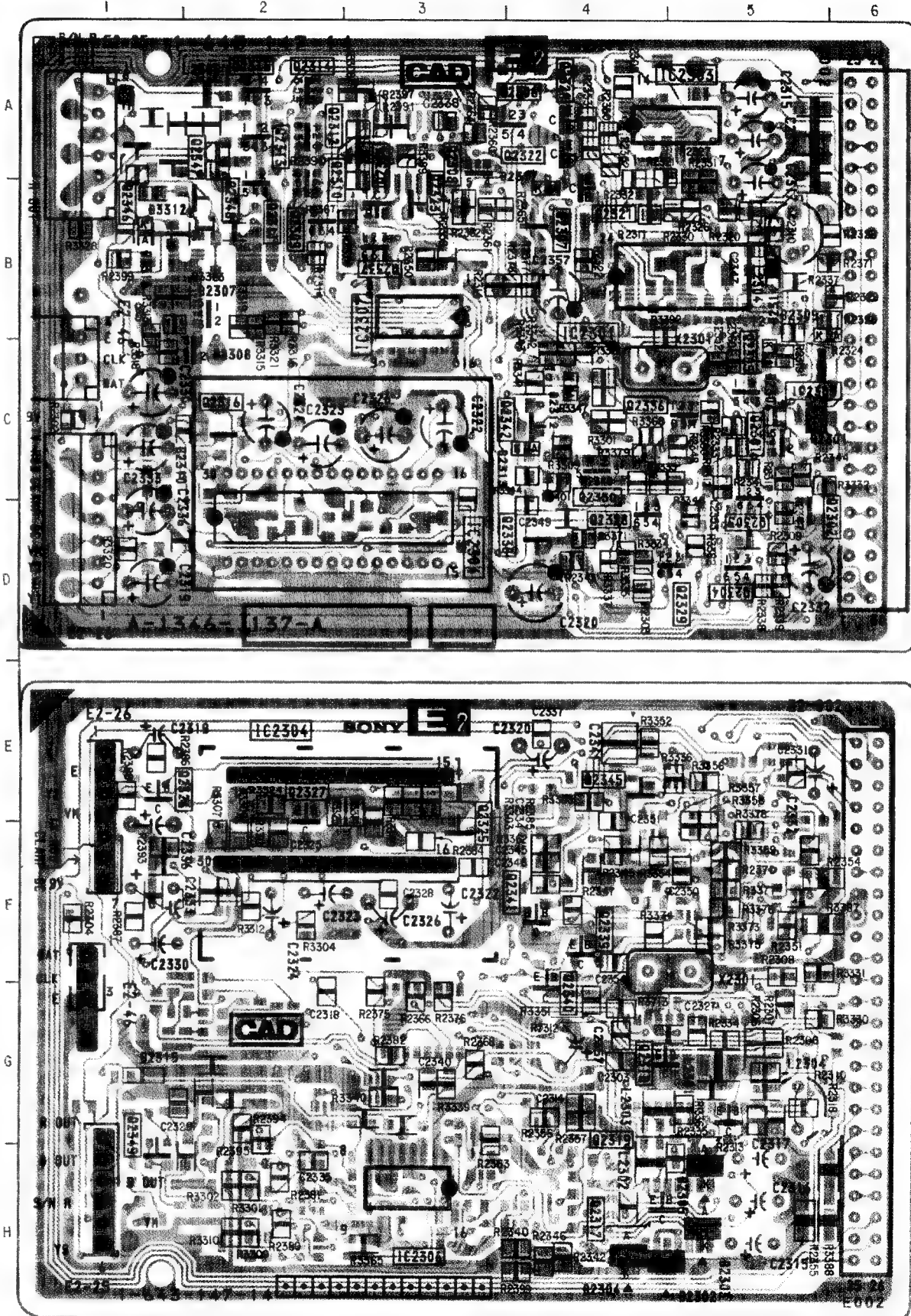


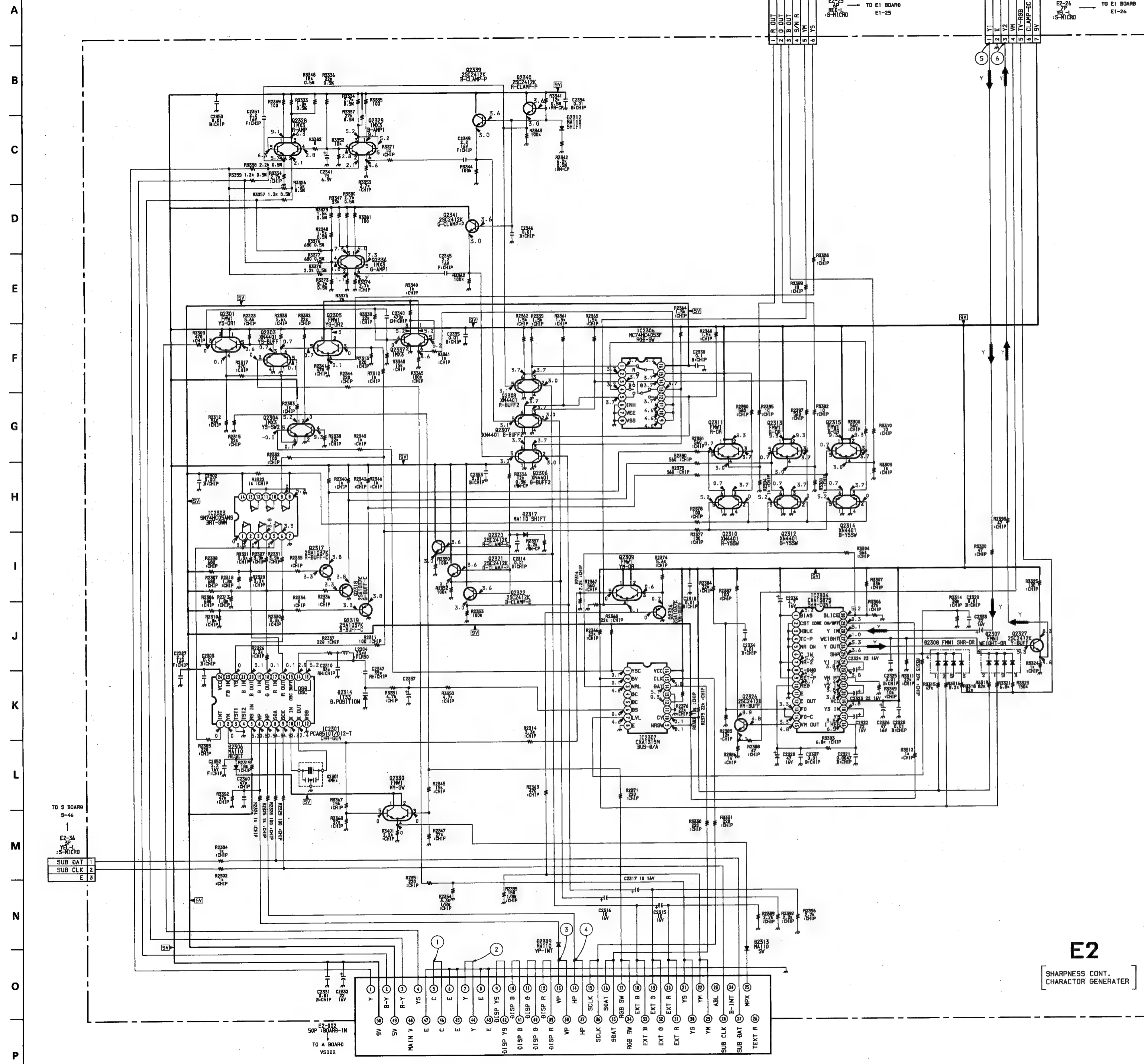
Note :

• : Pattern of the rear side.

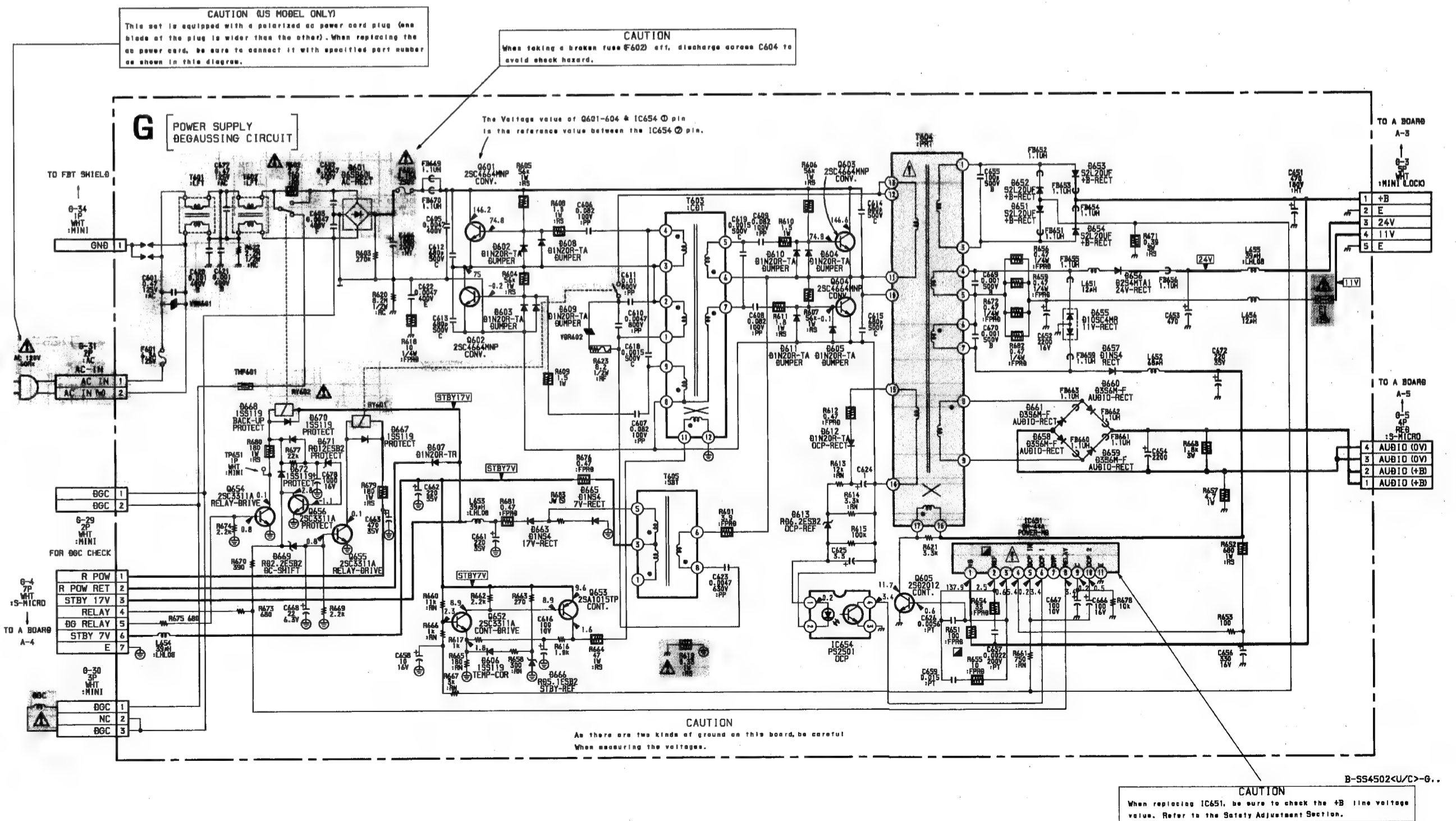
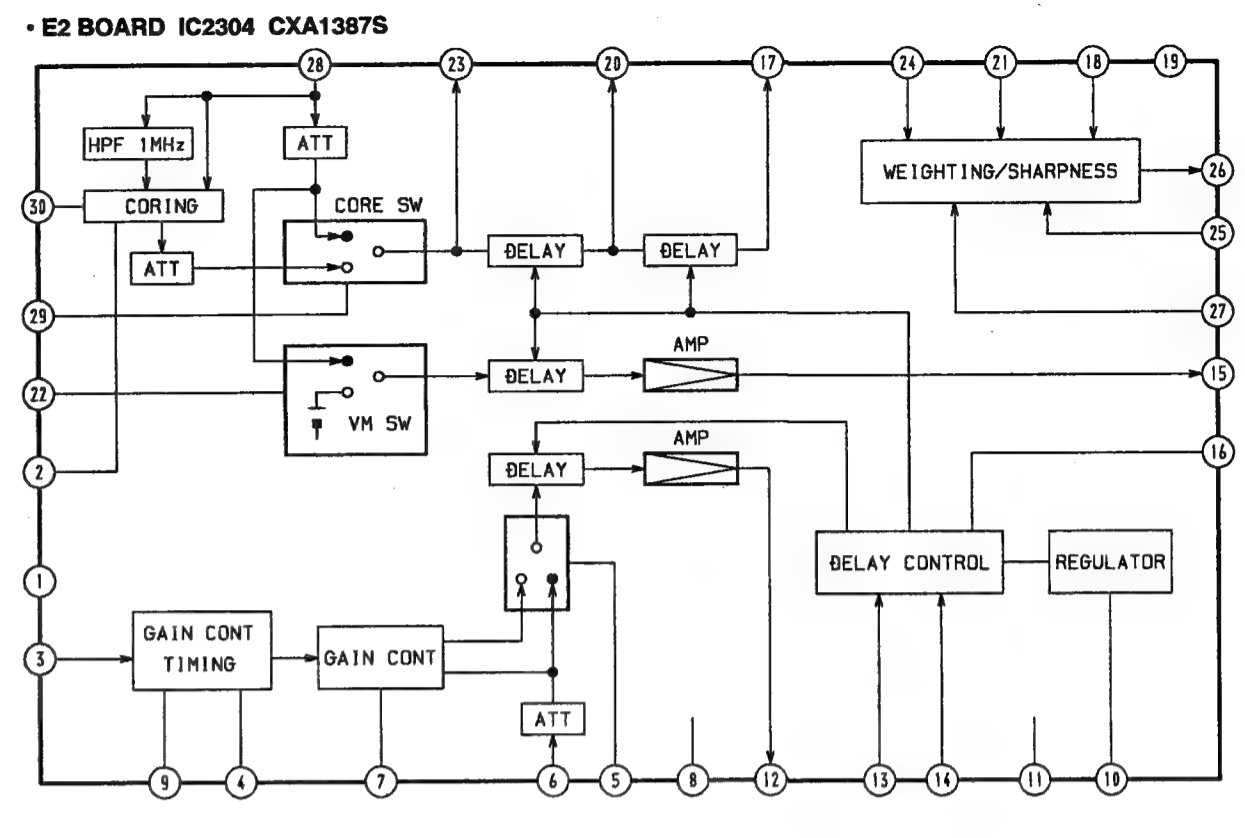
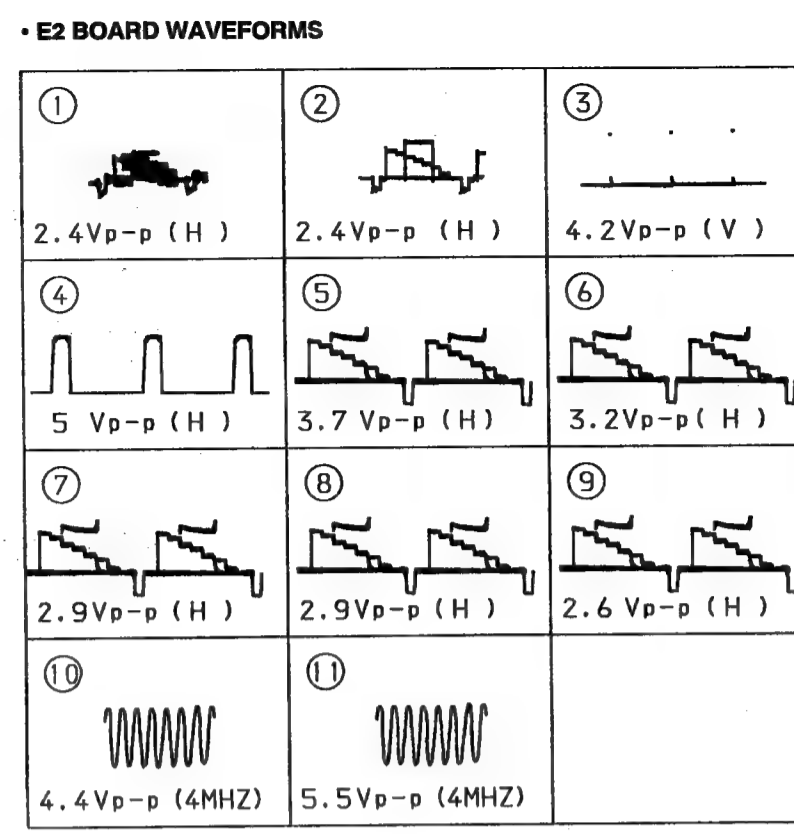
- E2 BOARD -

IC		IC2031	B-4
IC2303	A-5	IC2304	D-3, E-2
IC2306	H-3	IC2307	B-3
TRANSISTOR		Q2301	C-5
Q2303	C-5	Q2304	D-5
Q2305	C-5	Q2306	A-3
Q2307	B-4	Q2308	A-3
Q2309	B-2	Q2310	A-2
Q2311	A-2	Q2312	A-2
Q2313	A-2	Q2314	A-2
Q2315	A-2	Q2317	H-4
Q2318	G-4	Q2319	G-5
Q2320	A-4	Q2321	A-4
Q2322	A-4	Q2324	B-3
Q2326	E-1	Q2327	E-2
Q2328	D-4	Q2329	D-4
Q2330	C-4	Q2336	C-5
Q2337	B-3	Q2339	F-4
Q2340	F-4	Q2341	F-4
DIODE		D2306	C-5
D2307	B-2	D2308	B-2
D2309	B-2	D2312	C-4
D2313	C-4	D2314	B-5
D2317	A-4		





E2
SHARPNESS CONT.
CHARACTER GENERATOR



M

[MAIN CONTROL
μ - CON]

HS1

[USER CONTROL SW,
RC SENSE, LED]

HS2

[VIDEO - 3
FRONT TERMINAL]

V

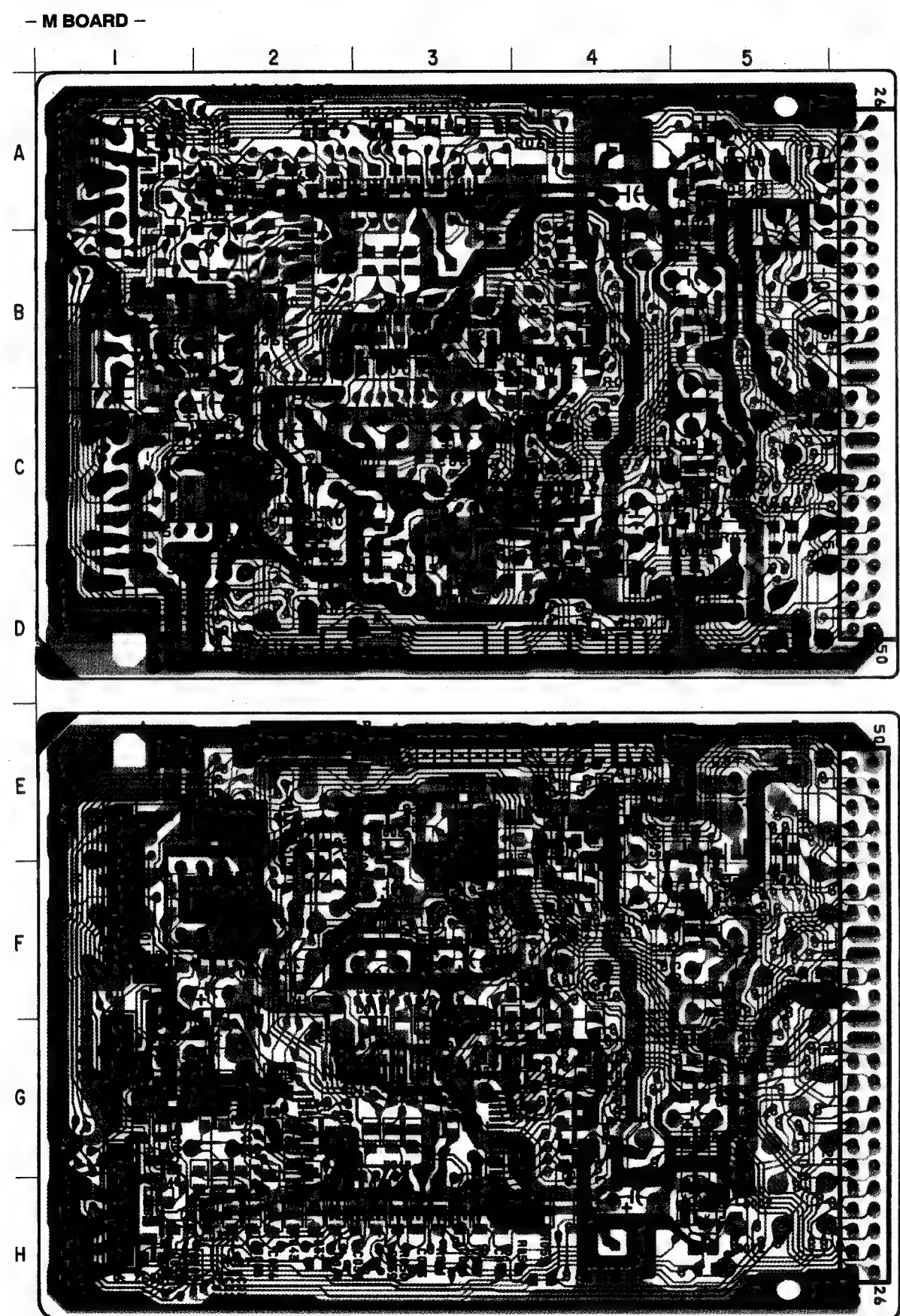
[VELOCITY
MODURATION]

LED

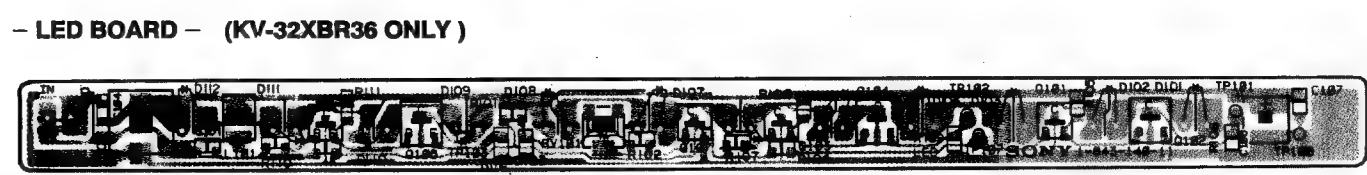
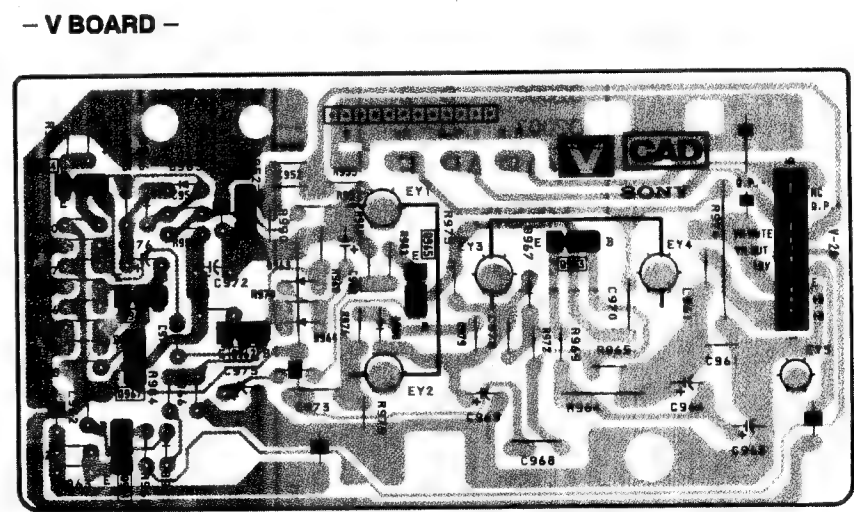
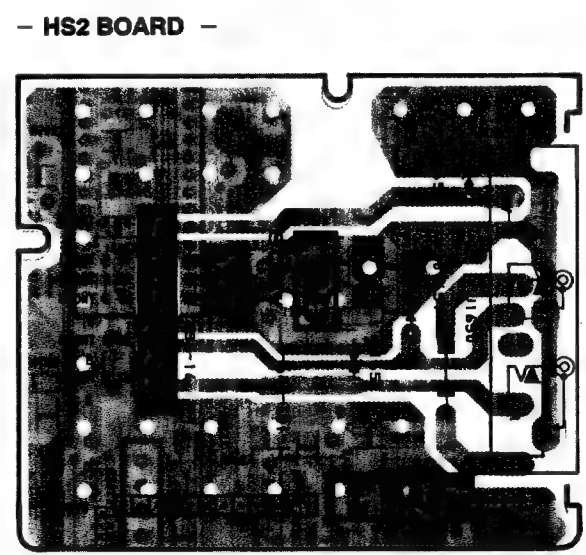
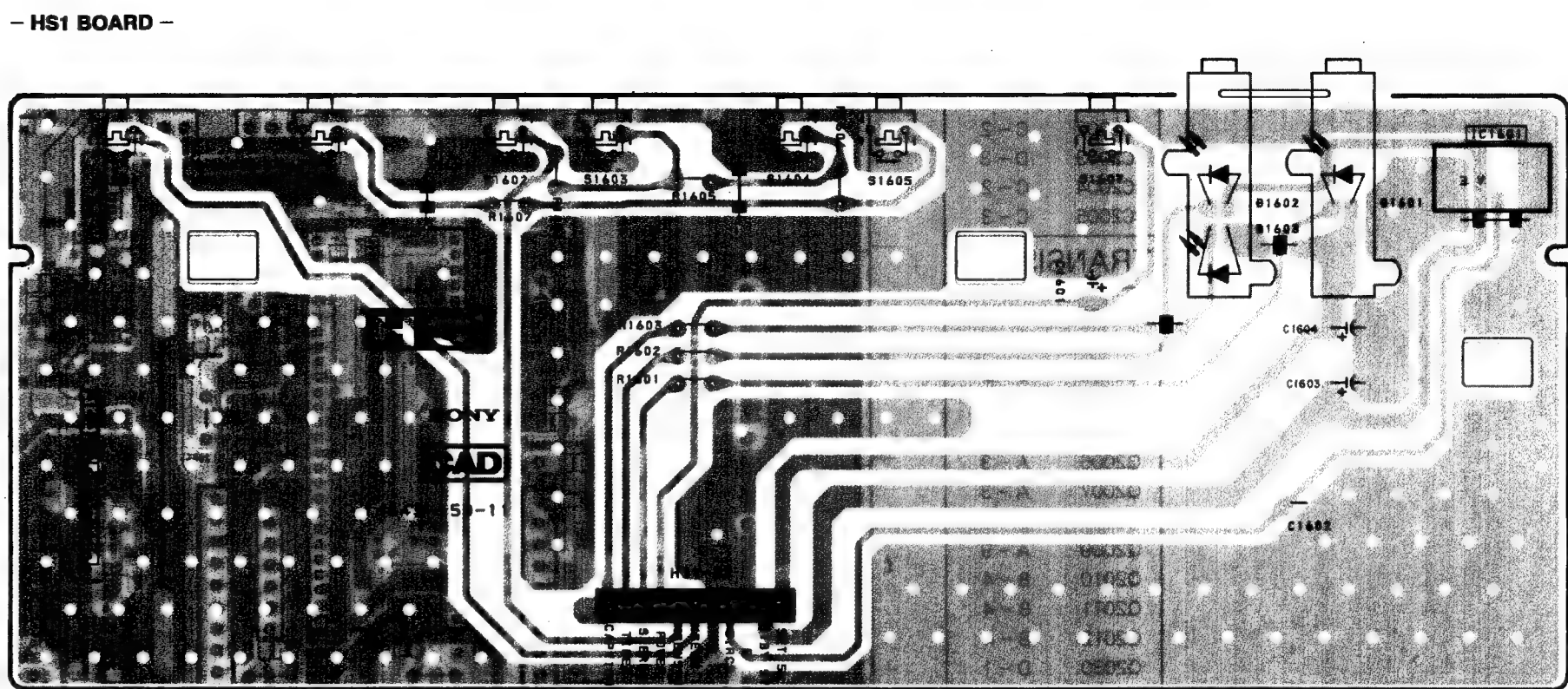
[EMITTER]

MAIN

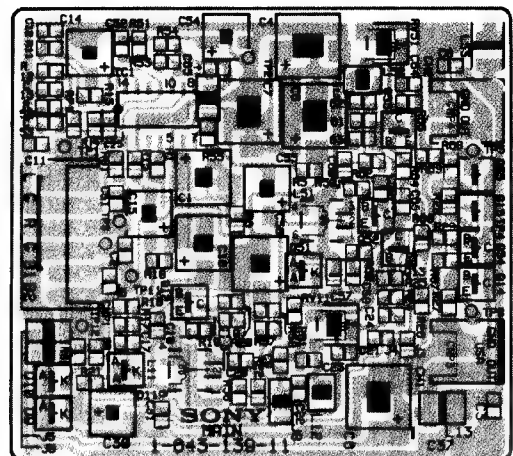
[MODULATOR]



IC	
IC001	C - 1
IC002	D - 2, E - 2
TRANSISTOR	
Q001	G - 5
Q009	G - 1
Q010	H - 1
Q011	F - 1
Q012	C - 5
Q013	A - 5
Q014	C - 4
DIODE	
D001	H - 5
D002	H - 5
D009	F - 1
D010	A - 4
D011	D - 2
D012	B - 4
D014	A - 1
D015	B - 4



MAIN BOARD - (KV-32XBR36 ONLY)



Note :

Pattern from the side which enables seeing.

Pattern of the rear side.

P3

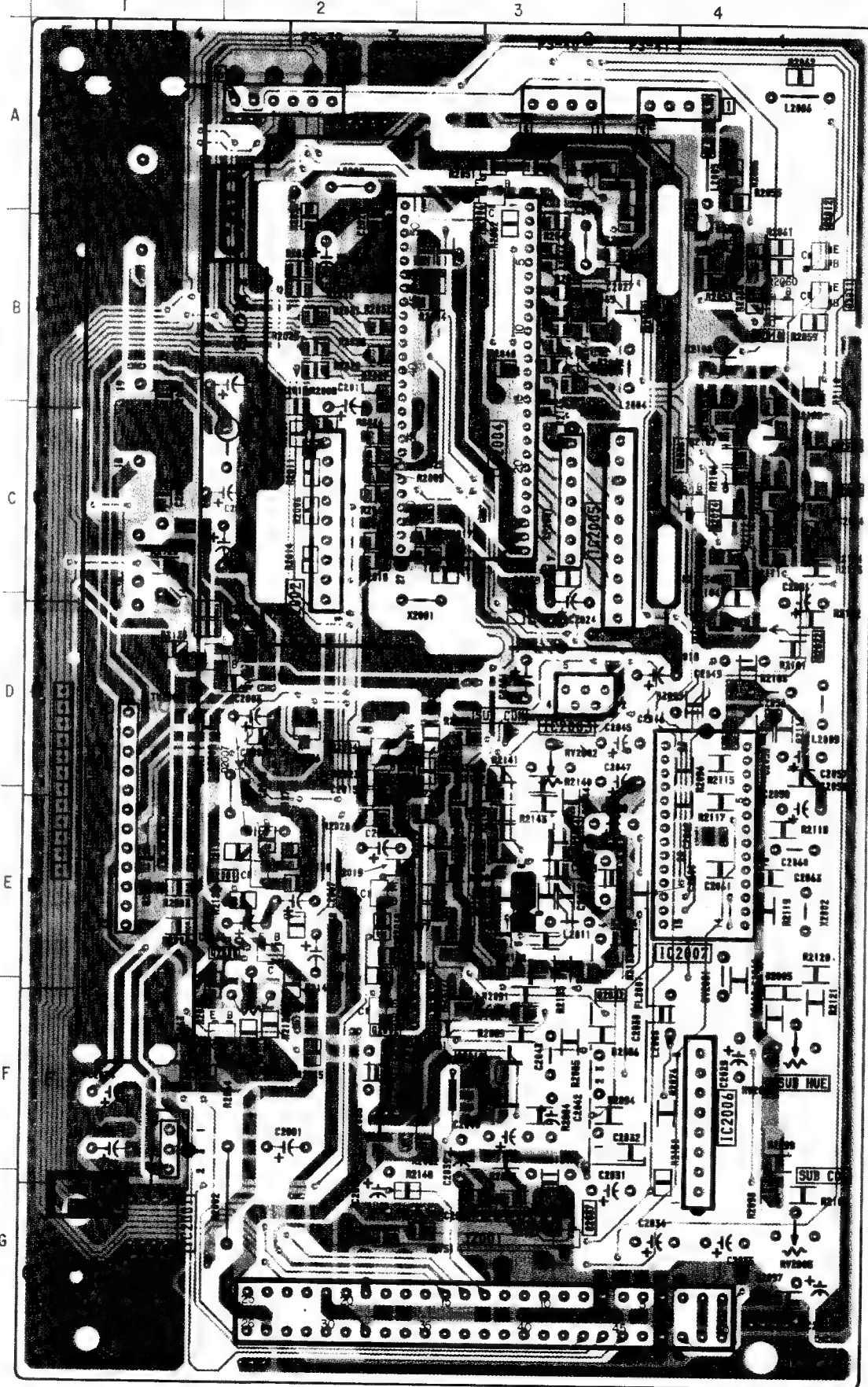
2ND CONT, μ -CON FOR PIP,
2ND TUNER - VIF/SIF FOR PIP,
Y/C JUNGLE FOR PIP, ANT SW CONT

P1

[PICTURE IN PICTURE]

- P3 BOARD - (KV-32XBR36 ONLY)

IC	
IC2001	F - 1
IC2002	C - 2
IC2003	D - 3
IC2004	C - 2
IC2005	C - 3
TRANSISTOR	
Q2001	E - 1
Q2002	F - 2
Q2003	E - 3
Q2004	D - 3
Q2005	B - 3
Q2006	A - 3
Q2007	A - 3
Q2008	E - 1
Q2009	A - 9
Q2010	B - 4
Q2011	B - 4
Q2012	B - 4
Q2030	D - 1
Q2031	F - 1
Q2036	C - 4
Q2037	G - 3
DIODE	
D2006	D - 2
D2007	D - 1
VARIABLE RESISTOR	
RV2001	F - 1

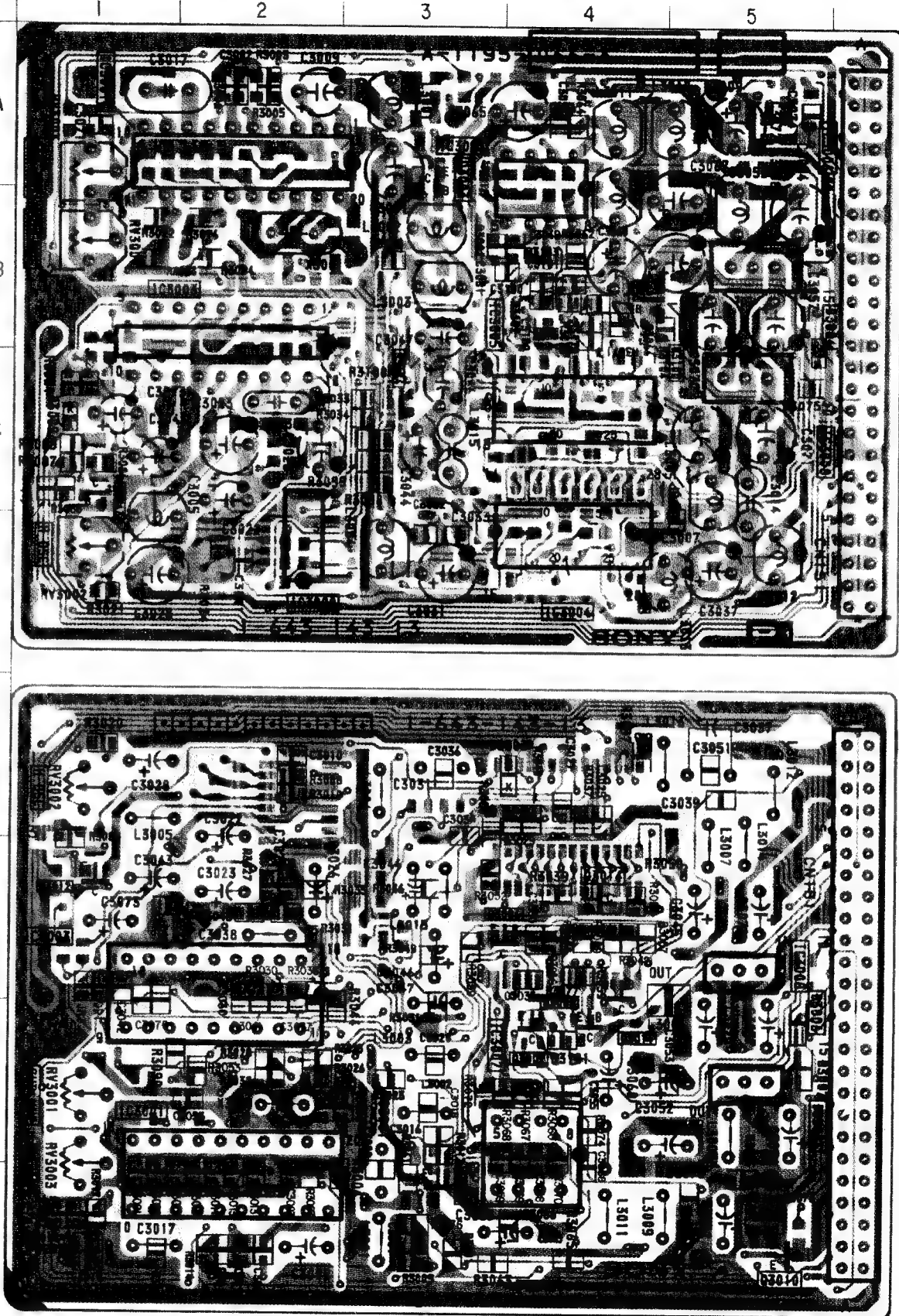


Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- P1 BOARD -

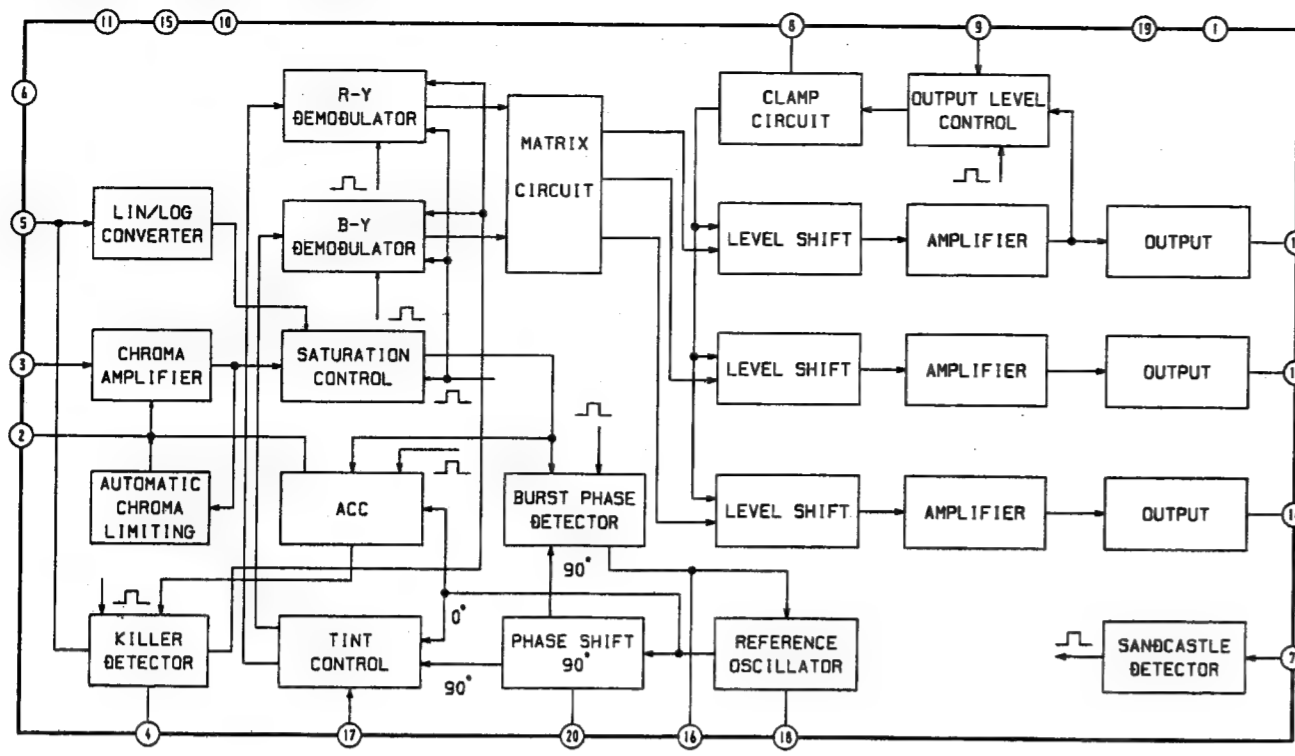
IC	
IC3001	A - 2, G - 2
IC3002	D - 2
IC3003	B - 2, F - 2
IC3004	D - 4
IC3005	C - 4
IC3006	B - 5, G - 5
IC3007	A - 4, G - 4
IC3008	C - 5, F - 5
TRANSISTOR	
Q3003	A - 3
Q3004	C - 3
Q3006	F - 4
Q3007	G - 4
Q3008	H - 3
Q3009	G - 4
Q3010	H - 5
Q3011	F - 4
Q3012	F - 1
Q3013	C - 1
Q3014	F - 4
Q3100	B - 4
DIODE	
D3003	E - 4
D3004	B - 5
D3009	C - 1
VARIABLE RESISTOR	
RV3001	B - 1, G - 1
RV3002	D - 1, E - 1
RV3003	A - 1, G - 1



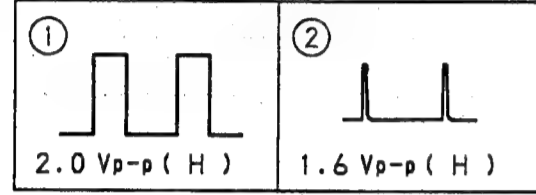
Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

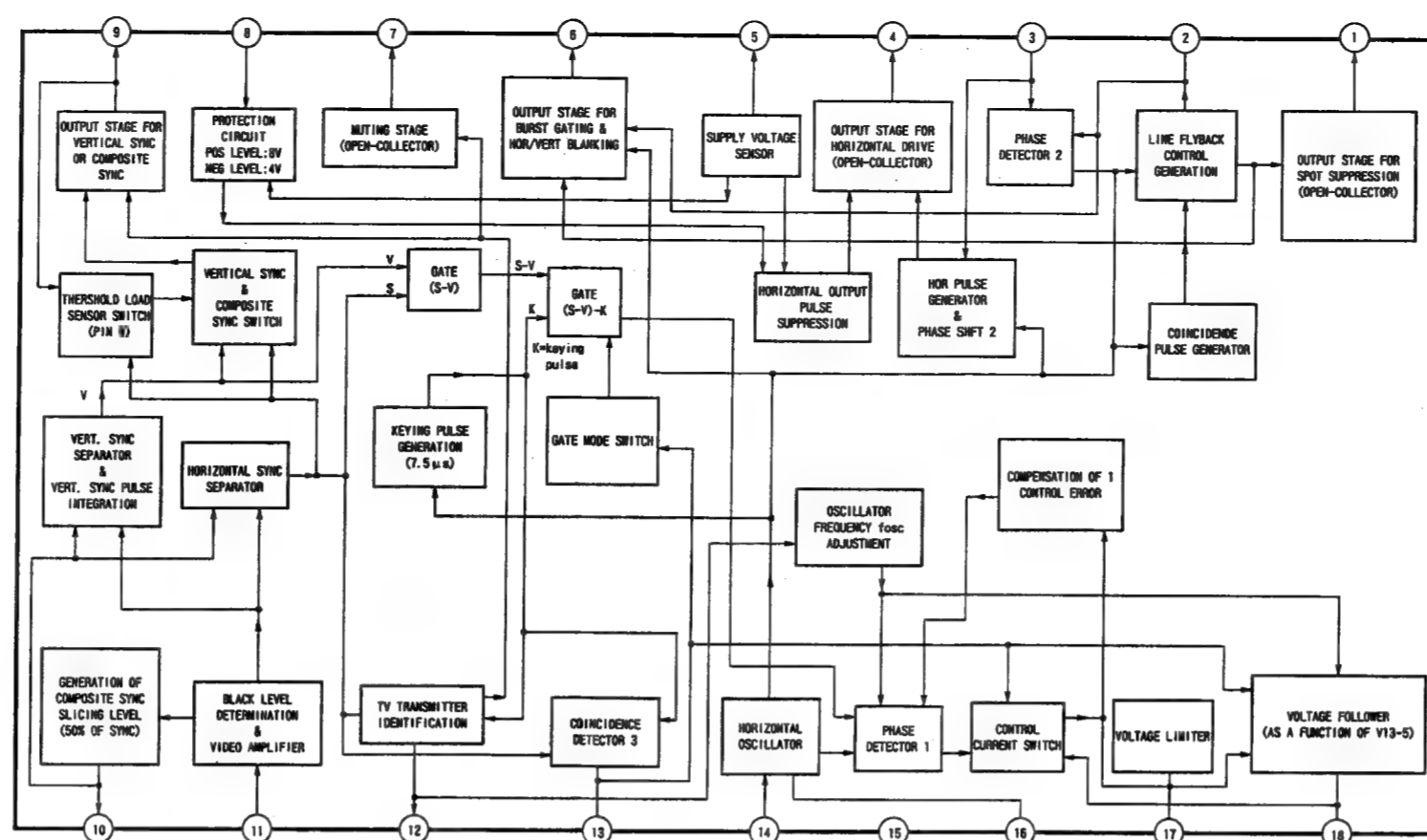
• P1 BOARD IC3001 TDA3769



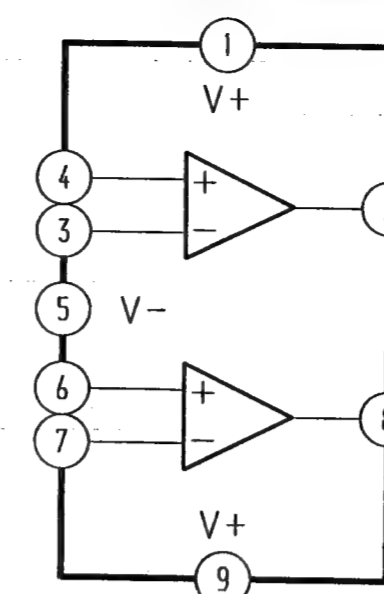
• P1 BOARD WAVEFORMS



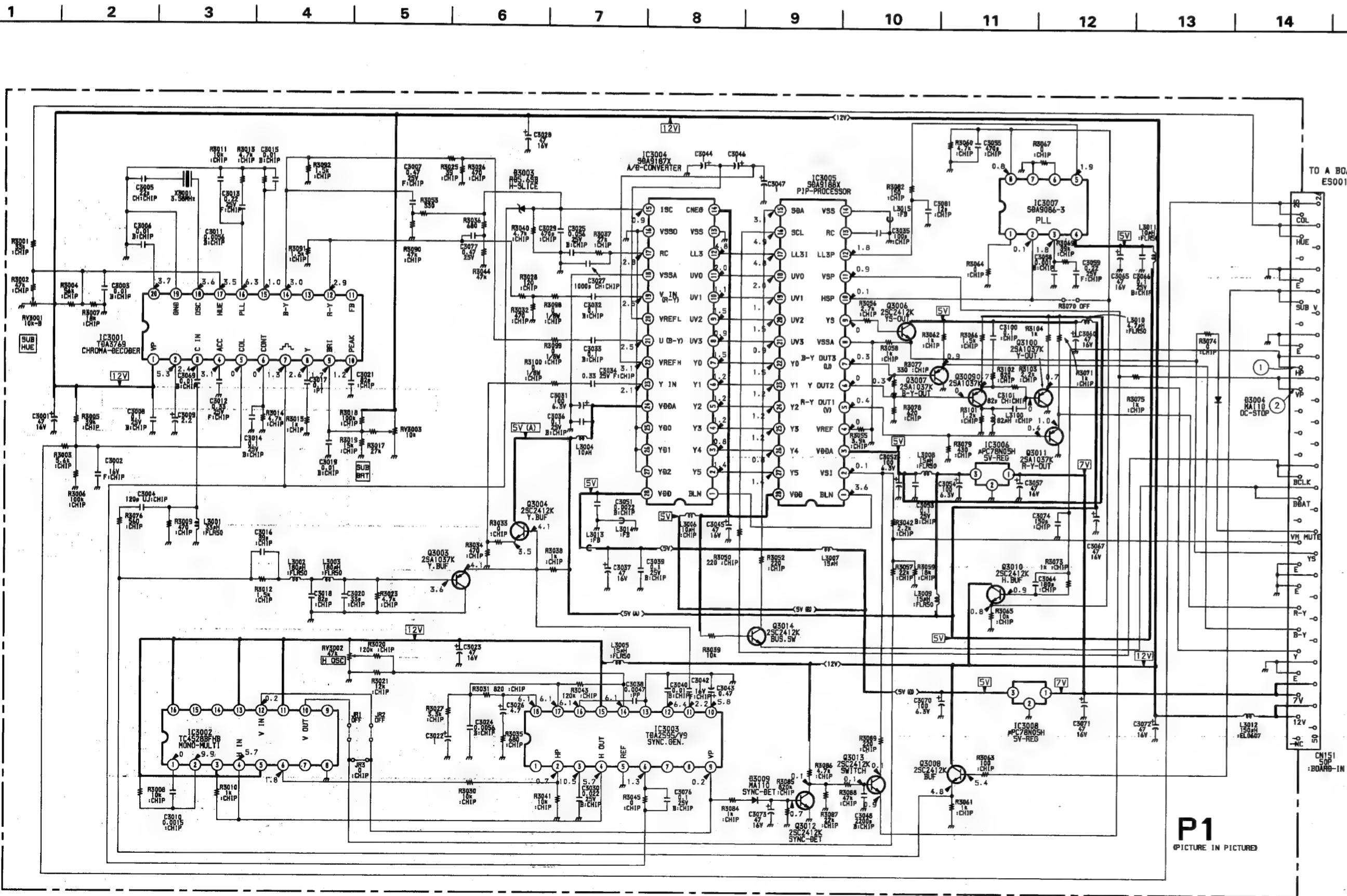
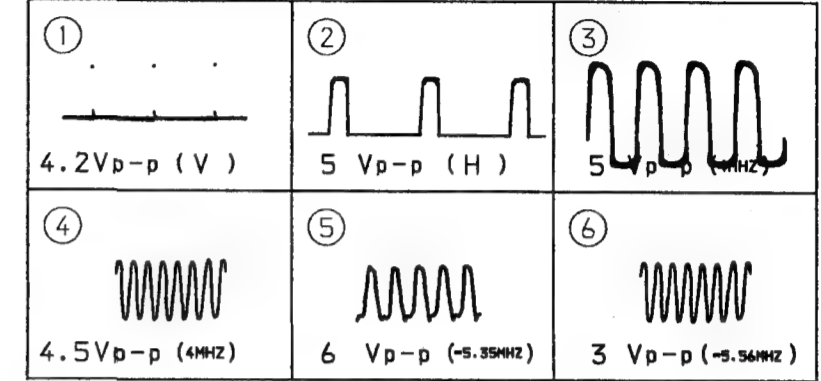
• P1 BOARD IC3003 TDA2595/V9



• P3 BOARD IC2002 NJM2903S

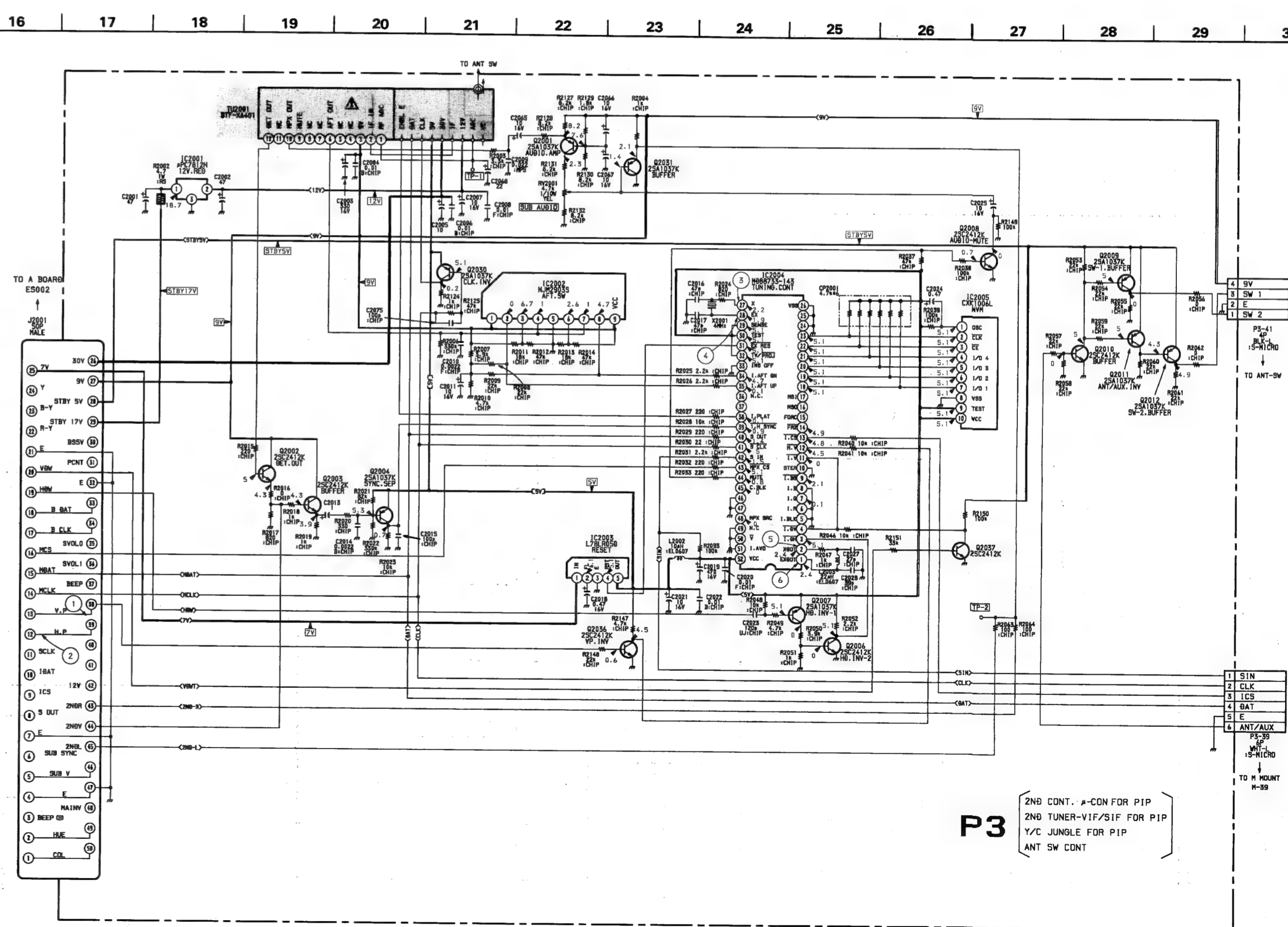


• P3 BOARD WAVEFORMS



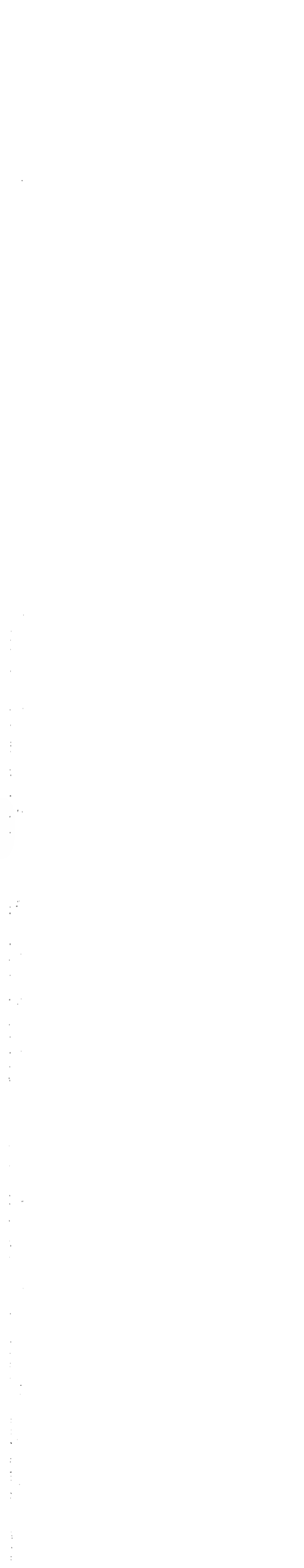
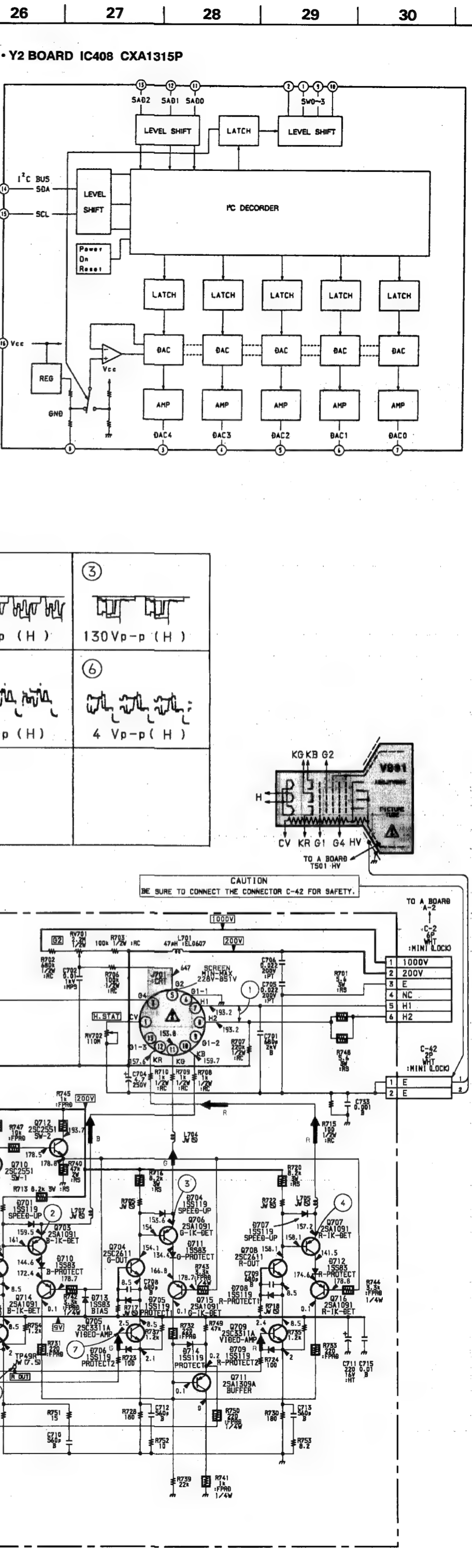
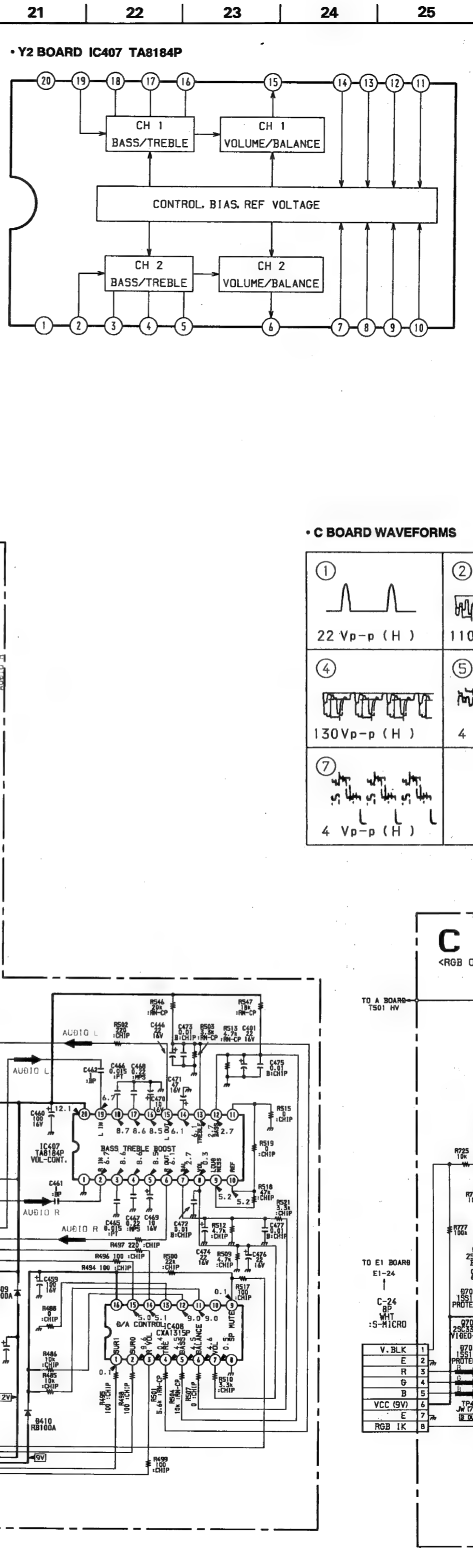
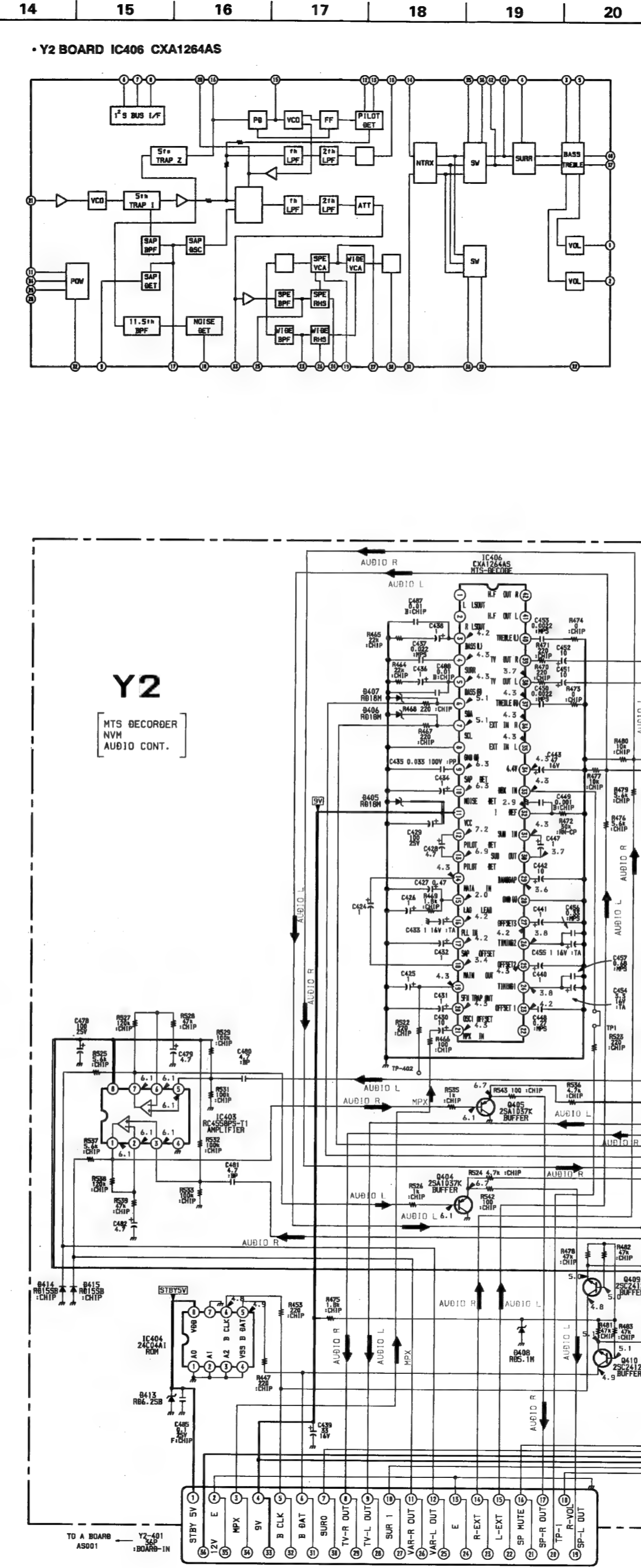
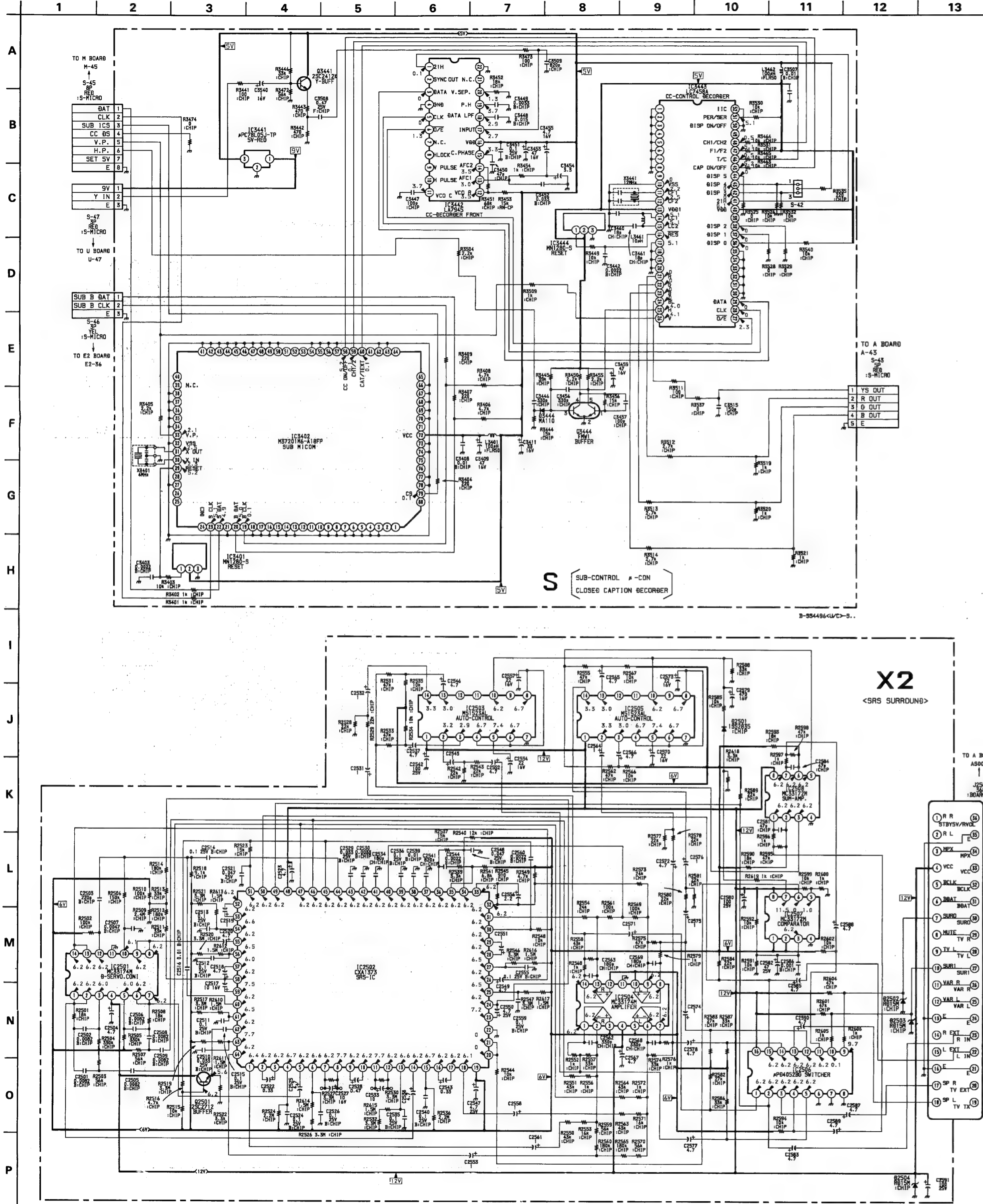
P1
PICTURE IN PICTURE

B-554496/4U/C3-P1.



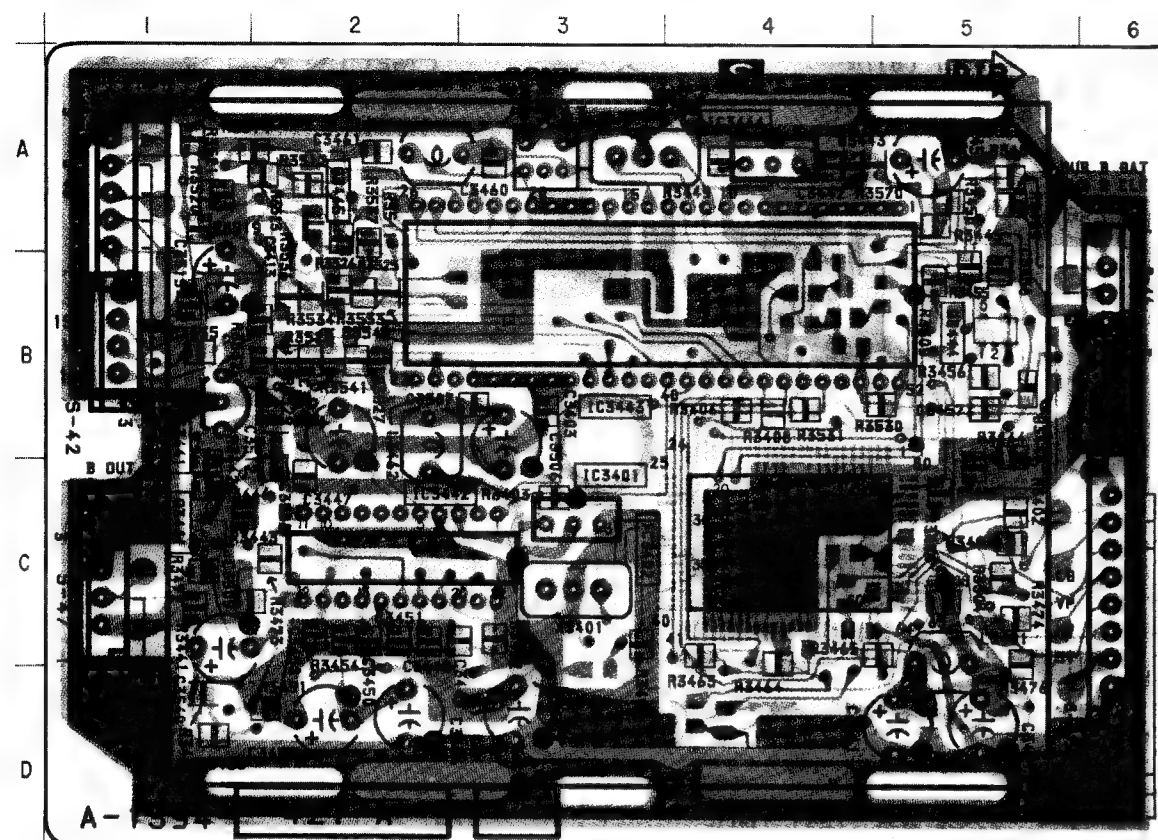
P3

2ND CONT. A-CON FOR PIP
2ND TUNER-VIF/SIF FOR PIP
Y/C JUNGLE FOR PIP
ANT SW CONT

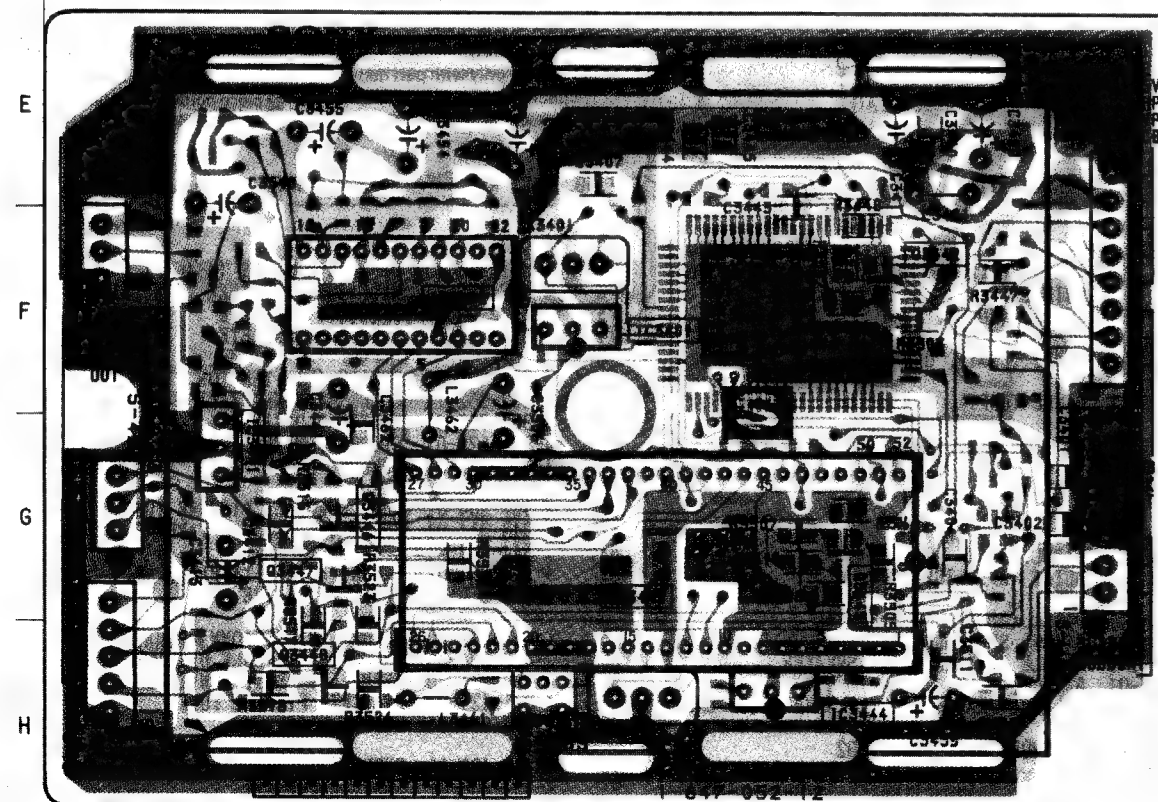


S [SUB - CONTROL, μ - CON,
CLOSED CAPTION DECODER] **X2** [SRS SURROUND] **Y2** [MTS DECORDER,
NVM, AUDIO CONT.] **C** [R G B OUT]

- S BOARD -



IC	
IC3401	C - 3, F - 3
IC3402	C - 4
IC3441	B - 1, G - 1
IC3442	C - 2, F - 2
IC3443	B - 3, G - 3
IC3444	A - 4, H - 4
TRANSISTOR	
C3441	C - 1
C3444	B - 5
DIODE	
D3444	B - 5

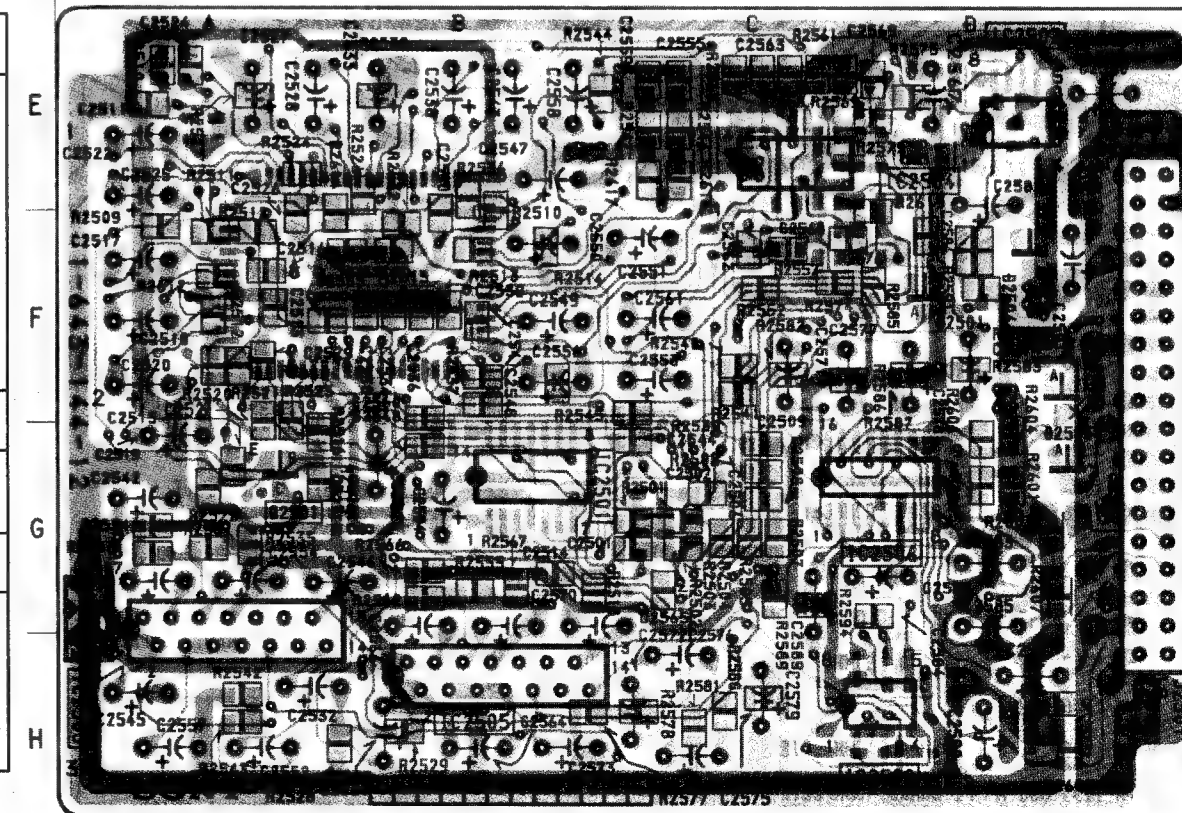
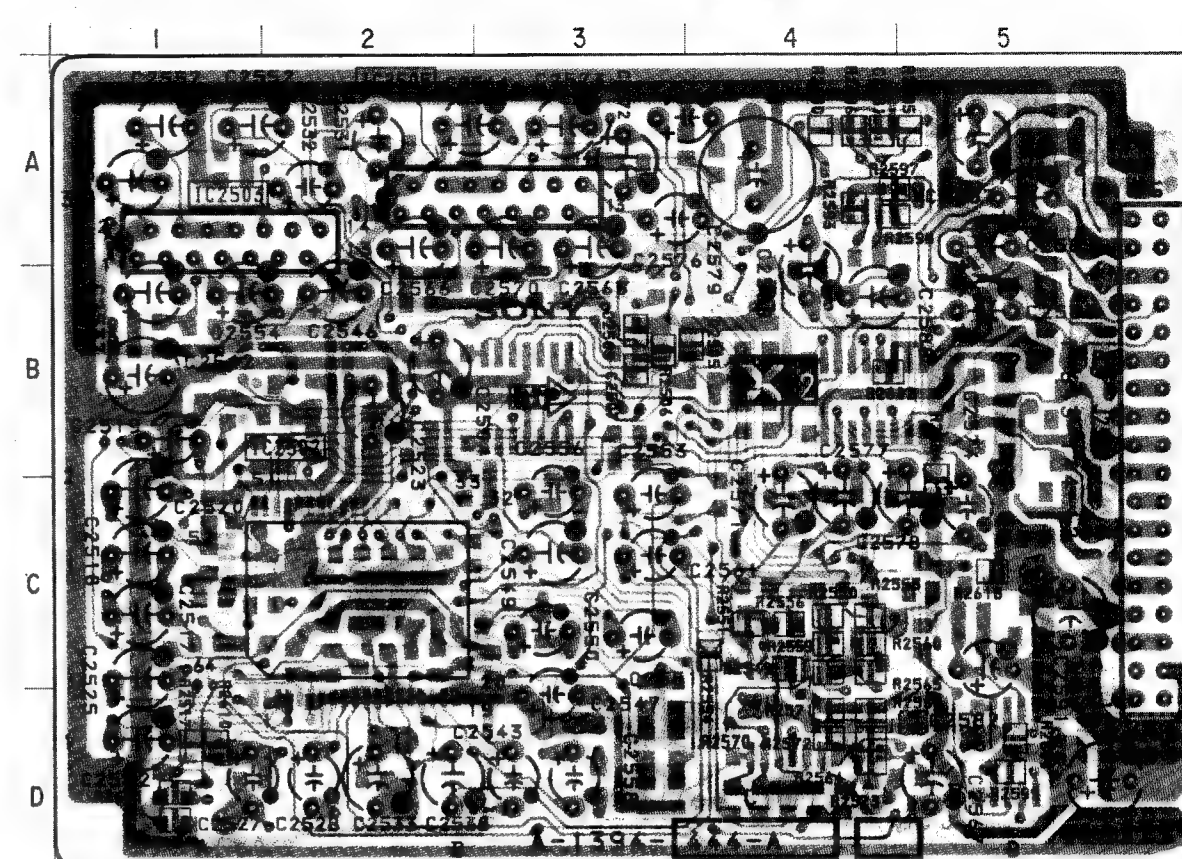


IC		
IC2501		G - 3
IC2502	C - 2	
IC2503	A - 1	H - 1
IC2504		E - 4
IC2505	A - 2	H - 2
IC2506		G - 4
IC2507		E - 5
IC2508		H - 4
TRANSISTOR		
Q2501	G - 2	
DIODE		
D2501		F - 5
D2502		F - 5
D2503		G - 5
D2504		F - 5

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- X2 BOARD -



Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

SECTION 8
ELECTRICAL PARTS LIST

P3

NOTE:

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

• All resistors are in ohms
• F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

• MF : μ F, PF : μ F

COILS

• MMH : mH, UH : μ H

• The components identified by \boxtimes in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1195-068-A P3 BOARD, COMPLETE (KV-32XBR36(US/CND)) *****				IC2003	8-759-805-37	IC L78LRO5D-MA	
				IC2004	8-759-066-51	IC MB88733-143	
				IC2005	8-759-803-25	IC CXK1006L	
<CAPACITOR>				<JACK>			
C2001	1-124-910-11	ELECT 47MF	20% 50V	J2001	*1-573-962-11	CONNECTOR (MALE) 50P	
C2002	1-124-910-11	ELECT 47MF	20% 50V	<COIL>			
C2003	1-124-119-00	ELECT 330MF	20% 16V	L2002	1-410-663-31	INDUCTOR 10UH	
C2004	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	L2003	1-410-667-31	INDUCTOR 22UH	
C2005	1-124-261-00	ELECT 10MF	20% 50V	<CONNECTOR>			
C2006	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	P3-39	*1-564-521-11	PLUG, CONNECTOR 6P	
C2007	1-126-157-11	ELECT 10MF	20% 16V	P3-41	*1-564-519-11	PLUG, CONNECTOR 4P	
C2008	1-163-031-11	CERAMIC CHIP 0.01MF	5% 50V	<TRANSISTOR>			
C2009	1-163-157-00	FILM 0.022MF	5% 50V	Q2001	8-729-216-22	TRANSISTOR 2SA1162-G	
C2010	1-164-161-11	CERAMIC CHIP 0.0022MF	50V	Q2002	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2011	1-126-157-11	ELECT 10MF	20% 16V	Q2003	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2013	1-126-301-11	ELECT 1MF	20% 50V	Q2004	8-729-216-22	TRANSISTOR 2SA1162-G	
C2014	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	Q2005	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2015	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	Q2006	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2016	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	Q2007	8-729-216-22	TRANSISTOR 2SA1162-G	
C2017	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	Q2008	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
C2018	1-124-465-00	ELECT 0.47MF	20% 50V	Q2009	8-729-216-22	TRANSISTOR 2SA1162-G	
C2019	1-126-103-11	ELECT 470MF	20% 16V	Q2010	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2020	1-163-031-11	CERAMIC CHIP 0.01MF	50V	Q2011	8-729-216-22	TRANSISTOR 2SA1162-G	
C2021	1-126-157-11	ELECT 10MF	20% 16V	Q2012	8-729-216-22	TRANSISTOR 2SA1162-G	
C2022	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2030	8-729-216-22	TRANSISTOR 2SA1162-G	
C2023	1-163-119-00	CERAMIC CHIP 120PF	5% 50V	Q2031	8-729-216-22	TRANSISTOR 2SA1162-G	
C2024	1-124-465-00	ELECT 0.47MF	20% 50V	Q2036	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2025	1-126-157-11	ELECT 10MF	20% 16V	Q2037	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2027	1-163-103-00	CERAMIC CHIP 27PF	5% 50V	<RESISTOR>			
C2028	1-163-107-00	CERAMIC CHIP 39PF	5% 50V	R2002	1-216-357-00	METAL OXIDE 4.7 5% 1W F	
C2064	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V	R2003	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
C2065	1-126-320-11	ELECT 10MF	20% 16V	R2004	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C2066	1-126-157-11	ELECT 10MF	20% 16V	R2006	1-216-689-11	METAL GLAZE 39K 5% 1/10W	
C2067	1-126-157-11	ELECT 10MF	20% 16V	R2007	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
C2068	1-124-916-11	ELECT 22MF	20% 50V	R2008	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
C2075	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	R2009	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
<COMPOSITION CIRCUIT BLOCK>				R2010	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
CP2001	1-236-472-11	NETWORK, RES, THICK FILM		R2011	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
<DIODE>				R2012	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
D2006	8-719-105-45	DIODE RD3.3M-B1		R2013	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
D2007	8-719-911-19	DIODE 1SS119		R2014	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
<IC>							
IC2001	8-759-231-58	IC TA7812S					
IC2002	8-759-700-48	IC NJM2903S					

KV-32XBR26/32XBR36

RM-Y112A TDR-IF310/RM-Y113A

P3 A

Les composants identifiés par
une trame et une marque Δ
sont critiques pour la sécurité.
Ne les remplacer que par une
pièce portant le numéro spécifique.

The components identified by
shading and mark Δ are critical
for safety.
Replace only with part number
specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
R2015	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2016	1-216-295-00	METAL GLAZE	0 5% 1/10W
R2017	1-216-047-00	METAL GLAZE	820 5% 1/10W
R2018	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2019	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2020	1-216-037-00	METAL GLAZE	330 5% 1/10W
R2021	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R2022	1-216-109-00	METAL GLAZE	330K 5% 1/10W
R2023	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2024	1-216-047-00	METAL GLAZE	820 5% 1/10W
R2025	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2026	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2027	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2028	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2029	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2030	1-216-009-00	METAL GLAZE	22 5% 1/10W
R2031	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2032	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2033	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2037	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R2038	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2039	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2040	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2041	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2046	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2047	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2048	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2049	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R2050	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R2051	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2052	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R2053	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2054	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2055	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2056	1-216-295-00	METAL GLAZE	0 5% 1/10W
R2057	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2058	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2059	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2060	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2061	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2062	1-216-295-00	METAL GLAZE	0 5% 1/10W
R2063	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2064	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2093	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2124	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2125	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R2127	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R2128	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R2129	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R2130	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R2131	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R2132	1-216-676-11	METAL CHIP	11K 0.50% 1/10W
R2147	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R2148	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2149	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2150	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2151	1-216-085-00	METAL GLAZE	33K 5% 1/10W

<VARIABLE RESISTOR>

RV2001 1-238-015-11 RES, ADJ, CARBON 4.7K

REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<TUNER>				
TU2001A1-693-102-22 TUNER (BTF-XA401)				
<CRYSTAL>				
X2001	1-567-192-11	OSCILLATOR, CERAMIC 4MHZ		

*A-1297-137-A	A BOARD, COMPLETE (KV-32XBR26(US/CND))			

*A-1297-138-A	A BOARD, COMPLETE (KV-32XBR36(US/CND))			

4-382-854-11	SCREW (M3X10), P, SW (+)			
<CONNECTOR>				
A-2	*1-573-964-11	PIN, CONNECTOR (PC BOARD) 6P		
A-3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P		
A-4	*1-564-510-11	PLUG, CONNECTOR 7P		
A-5	*1-564-507-11	PLUG, CONNECTOR 4P		
A-11	*1-564-507-11	PLUG, CONNECTOR 4P		
A-12	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P		
A-13	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P		
A-14	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		
A-15	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		
A-18	1-573-296-21	CONNECTOR, BOARD TO BOARD 10P		
A-21	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P		
A-37	*1-564-514-11	PLUG, CONNECTOR 11P		
A-43	*1-564-508-11	PLUG, CONNECTOR 5P		
A-48	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		
A-49	*1-564-506-11	PLUG, CONNECTOR 3P		
A100	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P		
DY-1	*1-580-798-11	CONNECTOR PIN (DY) 6P		
ES002	*1-573-960-11	CONNECTOR (FEMALE) 50P		
<CAPACITOR>				
C201	1-126-101-11	ELECT	100MF	20% 16V
C202	1-102-108-00	CERAMIC	150PF	10% 50V
C210	1-102-121-00	CERAMIC	0.0022MF	10% 50V
C211	1-101-006-00	CERAMIC	0.047MF	50V
C213	1-126-103-11	ELECT	470MF	20% 16V
C214	1-126-101-11	ELECT	100MF	20% 16V
C215	1-124-910-11	ELECT	47MF	20% 50V
C216	1-126-101-11	ELECT	100MF	20% 16V
C217	1-124-126-00	ELECT	47MF	20% 25V
C218	1-126-103-11	ELECT	470MF	20% 16V
C219	1-136-169-00	FILM	0.22MF	5% 50V
C220	1-124-910-11	ELECT	47MF	20% 50V
C221	1-124-910-11	ELECT	47MF	20% 50V
C223	1-123-875-11	ELECT	10MF	20% 50V
C224	1-124-261-00	ELECT	10MF	20% 50V
C225	1-124-120-11	ELECT	220MF	20% 16V
C226	1-124-621-11	ELECT	3300MF	20% 6.3V
C299	1-126-101-11	ELECT	100MF	20% 16V
C501	1-137-116-11	FILM	1MF	5% 200V
C502	1-130-728-00	FILM	0.0022MF	5% 50V
C504	1-136-161-00	FILM	0.047MF	5% 50V
C505	1-124-790-11	ELECT	0.47MF	20% 100V
C506	1-124-480-11	ELECT	470MF	20% 25V
C508	1-162-114-00	CERAMIC	0.0047MF	2KV


The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.


Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.


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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C509	1-123-946-00	ELECT	4.7MF 20%	250V	C1501	1-124-916-11	ELECT 22MF 20% 50V
C510	1-102-110-00	CERAMIC	220PF 10%	50V	C1502	1-126-301-11	ELECT 1MF 20% 50V
C511	1-124-477-11	ELECT	47MF 20%	25V	C1503	1-102-114-00	CERAMIC 470PF 10% 50V
C512	1-162-318-11	CERAMIC	0.001MF 10%	500V	C1504	1-124-480-11	ELECT 470MF 20% 25V
C513	1-106-391-12	MYLAR	0.1MF 10%	200V	C1505	1-124-911-11	ELECT 220MF 20% 50V
C514	1-124-477-11	ELECT	47MF 20%	25V	C1506	1-136-171-00	FILM 0.33MF 5% 50V
C515	1-162-117-00	CERAMIC	100PF 10%	500V	C1507	1-106-224-00	MYLAR 0.15MF 10% 100V
C517	1-124-477-11	ELECT	47MF 20%	25V	C1508	1-124-480-11	ELECT 470MF 20% 25V
C519	1-124-472-11	ELECT	470MF 20%	10V	C1509	1-124-122-11	ELECT 100MF 20% 50V
C520 Δ	1-162-116-91	CERAMIC	680PF 10%	2KV	<DIODE>		
C521 Δ	1-137-606-21	FILM	0.023MF 3%	2KV	D205	8-719-911-19	DIODE 1SS119
C522	1-162-116-00	CERAMIC	680PF 10%	2KV	D206	8-719-911-19	DIODE 1SS119
C523	1-124-465-00	ELECT	0.47MF 20%	50V	D207	8-719-911-19	DIODE 1SS119
C524	1-130-487-00	MYLAR	0.022MF 5%	50V	D208	8-719-911-19	DIODE 1SS119
C525	1-162-116-00	CERAMIC	680PF 10%	2KV	D209	8-719-510-48	DIODE DIN20R
C526 Δ	1-136-895-51	FILM	0.068MF 5%	630V	D213	8-719-110-78	DIODE RD33ES-B2
C527	1-130-495-00	MYLAR	0.1MF 5%	50V	D501	8-719-018-82	DIODE RGP02-20EL-6394
C528	1-106-359-00	MYLAR	0.0047MF 10%	200V	D502 Δ	8-719-302-44	DIODE EL12-V1
C531	1-124-634-11	ELECT	1MF 20%	250V	D504	8-719-911-19	DIODE 1SS119
C532	1-124-477-11	ELECT	47MF 20%	25V	D506	8-719-109-90	DIODE RD5.6ES-B3
C533	1-137-119-11	FILM	2MF 5%	200V	D508	8-719-109-88	DIODE RD5.6ES-B1
C534	1-137-116-11	FILM	1MF 5%	200V	D509	8-719-110-03	DIODE RD7.5ES-B2
C535	1-124-480-11	ELECT	470MF 20%	25V	D511	8-719-300-33	DIODE RU-3AM
C536	1-102-228-00	CERAMIC	470PF 10%	500V	D512	8-719-908-03	DIODE GP08D
C537	1-106-343-00	MYLAR	0.001MF 10%	100V	D513	8-719-908-03	DIODE GP08D
C538	1-106-395-00	MYLAR	0.15MF 10%	200V	D514	8-719-312-72	DIODE RU30A
C539	1-123-950-00	ELECT	47MF 20%	250V	D515	8-719-936-84	DIODE RGP10GPKG3
C540	1-124-480-11	ELECT	470MF 20%	25V	D516	8-719-979-85	DIODE EGP20G
C541	1-102-228-00	CERAMIC	470PF 10%	500V	D518	8-719-109-93	DIODE RD6.2ES-B2
C542	1-106-387-00	MYLAR	0.068MF 10%	200V	D521	8-719-911-19	DIODE 1SS119
C546	1-123-024-21	ELECT	33MF	160V	D522	8-719-110-72	DIODE RD30ES-B2
C549	1-124-261-00	ELECT	10MF 20%	50V	D524	8-719-976-64	DIODE RGP02-17
C551	1-130-471-00	MYLAR	0.001MF 5%	50V	D525	8-719-911-19	DIODE 1SS119
C552	1-126-176-11	ELECT	220MF 20%	10V	D527	8-719-110-78	DIODE RD33ES-B2
C554 Δ	1-161-731-51	CERAMIC	0.001MF 10%	2KV	D528	8-719-911-19	DIODE 1SS119
C557	1-124-465-00	ELECT	0.47MF 20%	50V	D529	8-719-911-19	DIODE 1SS119
C561	1-124-261-00	ELECT	10MF 20%	50V	D530	8-719-911-19	DIODE 1SS119
C562	1-124-499-11	ELECT	1MF 20%	50V	D1407	8-719-911-19	DIODE 1SS119
C563	1-130-491-00	MYLAR	0.047MF 5%	50V	D1409	8-719-110-90	DIODE RD39ES-B4
C564	1-130-495-00	MYLAR	0.1MF 5%	50V	D1410	8-719-901-83	DIODE 1SS83
C565	1-130-495-00	MYLAR	0.1MF 5%	50V	D1411	8-719-901-83	DIODE 1SS83
C566	1-130-485-00	MYLAR	0.015MF 5%	50V	D1503	8-719-908-03	DIODE GP08D
C569	1-136-167-00	FILM	0.15MF 5%	50V	D4001	8-719-911-19	DIODE 1SS119
C570	1-130-471-00	MYLAR	0.001MF 5%	50V	<IC>		
C571	1-130-471-00	FILM	0.001MF 2%	50V	IC201	8-749-920-58	IC SI-3090CA
C572	1-124-907-11	ELECT	10MF 20%	50V	IC202	8-749-921-99	IC SI-3120CA (KV-32XBR36(US/CND))
C573	1-130-471-00	MYLAR	0.001MF 5%	50V	IC204	8-759-701-75	IC NJM7805FA
C575	1-102-038-00	CERAMIC	0.001MF	500V	IC205	8-759-144-84	IC UPC24M05HF
C578	1-106-367-00	MYLAR	0.01MF 10%	200V	IC206	8-759-231-58	IC TA7812S
C579	1-106-383-00	MYLAR	0.047MF	200V	IC501	8-759-987-16	IC LM393P
C1401	1-124-910-11	ELECT	47MF 20%	50V	IC502	1-809-726-11	MODULE, PROTECTOR PM-29
C1402	1-126-157-11	ELECT	10MF 20%	16V	IC503	8-759-987-16	IC LM393P
C1403	1-126-157-11	ELECT	10MF 20%	16V	IC504	8-759-231-58	IC TA7812S
C1404	1-126-157-11	ELECT	10MF 20%	16V	IC1401	8-759-246-70	IC TA8216H
C1405	1-124-910-11	ELECT	47MF 20%	50V	IC1501	8-759-506-46	IC TDA8179S
C1406	1-124-910-11	ELECT	47MF 20%	50V	<COIL>		
C1407	1-124-607-11	ELECT	2200MF 20%	50V	L201	1-408-408-00	INDUCTOR 8.2UH
C1408	1-136-165-00	FILM	0.1MF 5%	50V			
C1409	1-136-165-00	FILM	0.1MF 5%	50V			
C1424	1-124-607-11	ELECT	2200MF 20%	50V			
C1425	1-124-607-11	ELECT	2200MF 20%	50V			
C1426	1-126-157-11	ELECT	10MF 20%	16V			
C1435	1-124-916-11	ELECT	22MF 20%	50V			
C1437	1-130-499-00	MYLAR	0.22MF 5%	50V			

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• The components identified by  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L205	1-408-421-00	INDUCTOR	100UH	R234	1-249-409-11	CARBON	220 5% 1/4W
L208	1-410-785-31	INDUCTOR	0.22UH	R235	1-249-409-11	CARBON	220 5% 1/4W
L210	1-408-408-00	INDUCTOR	8.2UH	R236	1-249-409-11	CARBON	220 5% 1/4W
L502	1-412-552-31	INDUCTOR	2.2MMH	R237	1-249-409-11	CARBON	220 5% 1/4W
L508	1-421-541-00	COIL, CHOK	1000UH	R238	1-249-409-11	CARBON	220 5% 1/4W
L509	1-459-104-00	COIL, WITH CORE	10MMH	R239	1-249-409-11	CARBON	220 5% 1/4W
L510	1-460-197-11	COIL, FERRITE (PMC)		R240	1-249-482-11	CARBON	4.7 5% 1/2W F
L511	1-412-519-11	INDUCTOR	3.3UH	R501	1-215-442-00	METAL	7.5K 1% 1/4W
L512	1-412-531-31	INDUCTOR	33UH	R504	1-215-869-11	METAL OXIDE	1K 5% 1W F
L513	1-412-519-11	INDUCTOR	3.3UH	R505	1-215-449-00	METAL	15K 1% 1/4W
L515	1-410-645-31	INDUCTOR	100UH	R506	1-249-423-11	CARBON	3.3K 5% 1/4W
L517	1-459-973-21	COIL, HORIZONTAL LINEARITY		R507	1-249-411-11	CARBON	330 5% 1/4W
L520	1-412-531-31	INDUCTOR	33UH	R508	1-249-435-11	CARBON	33K 5% 1/4W
L521	1-459-148-00	COIL		R509	1-249-441-11	CARBON	100K 5% 1/4W
L1501	1-412-525-21	INDUCTOR	10UH	R510	1-249-409-11	CARBON	220 5% 1/4W F
L1502	1-412-525-21	INDUCTOR	10UH	R511	1-249-397-11	CARBON	22 5% 1/4W F
L1503	1-412-525-21	INDUCTOR	10UH	R512	1-249-423-11	CARBON	3.3K 5% 1/4W
<TRANSISTOR>				R513	1-249-425-11	CARBON	4.7K 5% 1/4W
Q201	8-729-119-78	TRANSISTOR	2SC2785-HFE	R514	1-249-438-11	CARBON	56K 5% 1/4W
Q202	8-729-119-78	TRANSISTOR	2SC2785-HFE	R515	1-249-433-11	CARBON	22K 5% 1/4W
Q501	8-729-011-07	TRANSISTOR	2SC4763(LBSONY)	R517	1-216-361-00	METAL OXIDE	0.22 5% 2W F
Q502	8-729-140-97	TRANSISTOR	2SB734-34	R519	1-247-755-11	CARBON	1.8K 5% 1/2W F
Q504	8-729-119-76	TRANSISTOR	2SA1175-HFE	R520	1-249-441-11	CARBON	100K 5% 1/4W
Q506	8-729-011-00	TRANSISTOR	2SK1916-53-F87	R521	1-216-481-11	METAL OXIDE	1.2K 5% 3W F
Q507	8-729-119-80	TRANSISTOR	2SC2688-LK	R522	1-215-917-11	METAL OXIDE	1K 5% 3W F
Q509	8-729-119-76	TRANSISTOR	2SA1175-HFE	R523	1-249-425-11	CARBON	4.7K 5% 1/4W
Q510	8-729-119-78	TRANSISTOR	2SC2785-HFE	R524	1-215-445-00	METAL	10K 1% 1/4W
Q512	8-729-119-78	TRANSISTOR	2SC2785-HFE	R526	1-249-401-11	CARBON	47 5% 1/4W
Q513	8-729-140-96	TRANSISTOR	2SD774-34	R528	1-247-903-00	CARBON	1M 5% 1/4W
Q515	8-729-119-76	TRANSISTOR	2SA1175-HFE	R529	1-249-429-11	CARBON	10K 5% 1/4W
Q516	8-729-119-76	TRANSISTOR	2SA1175-HFE	R530	1-215-457-00	METAL	33K 1% 1/4W
Q1401	8-729-119-78	TRANSISTOR	2SC2785-HFE	R532	1-249-437-11	CARBON	47K 5% 1/4W
Q1407	8-729-119-78	TRANSISTOR	2SC2785-HFE	R533	1-247-887-00	CARBON	220K 5% 1/4W
Q1408	8-729-119-78	TRANSISTOR	2SC2785-HFE	R534	1-247-883-00	CARBON	150K 5% 1/4W
Q1501	8-729-119-78	TRANSISTOR	2SC2785-HFE	R535	1-249-397-11	CARBON	22 5% 1/4W F
Q1502	8-729-119-78	TRANSISTOR	2SC2785-HFE	R537	1-215-465-00	METAL	68K 1% 1/4W
<RESISTOR>				R538	1-249-439-11	CARBON	68K 5% 1/4W
R210	1-249-441-11	CARBON	100K 5% 1/4W	R539	1-215-437-00	METAL	4.7K 1% 1/4W
R211	1-249-425-11	CARBON	4.7K 5% 1/4W	R541	1-249-397-11	CARBON	22 5% 1/4W F
R214	1-249-377-11	CARBON	0.47 5% 1/4W F	R542	1-215-890-11	METAL OXIDE	470 5% 2W F
R219	1-249-426-11	CARBON	5.6K 5% 1/4W	R546	1-215-441-00	METAL	6.8K 1% 1/4W
R221	1-249-409-11	CARBON	220 5% 1/4W	R547	1-249-441-11	CARBON	100K 5% 1/4W
R222	1-249-434-11	CARBON	27K 5% 1/4W (KV-32XBR36(US/CND))	R548	1-215-885-00	METAL OXIDE	68 5% 2W F
R222	1-249-436-11	CARBON	39K 5% 1/4W (KV-32XBR26(US/CND))	R549	1-215-881-11	METAL OXIDE	15 5% 2W F
R223	1-249-433-11	CARBON	22K 5% 1/4W (KV-32XBR36(US/CND))	R550	1-215-910-00	METAL OXIDE	68 5% 3W F
R223	1-249-434-11	CARBON	27K 5% 1/4W (KV-32XBR26(US/CND))	R551	1-247-743-11	CARBON	220 5% 1/2W F
R224	1-249-409-11	CARBON	220 5% 1/4W	R552	1-249-389-11	CARBON	4.7 5% 1/4W F
R225	1-249-419-11	CARBON	1.5K 5% 1/4W (KV-32XBR36(US/CND))	R553	1-249-377-11	CARBON	0.47 5% 1/4W F
R226	1-249-417-11	CARBON	1K 5% 1/4W	R554	1-249-377-11	CARBON	0.47 5% 1/4W F
R227	1-249-417-11	CARBON	1K 5% 1/4W (KV-32XBR36(US/CND))	R555	1-202-826-00	SOLID	4.7K 20% 1/2W
R230	1-215-923-00	METAL OXIDE	10K 5% 3W F	R558	1-259-882-11	CARBON	3.3M 5% 1/4W
R231	1-249-409-11	CARBON	220 5% 1/4W F	R560	1-247-901-11	CARBON	820K 5% 1/4W
R232	1-216-380-11	METAL OXIDE	8.2 5% 2W F	R564	1-215-470-00	METAL	110K 1% 1/4W
R233	1-249-409-11	CARBON	220 5% 1/4W	R565	1-249-425-11	CARBON	4.7K 5% 1/4W
				R566	1-249-425-11	CARBON	4.7K 5% 1/4W
				R568	1-249-417-11	CARBON	1K 5% 1/4W
				R569	1-249-393-11	CARBON	10 5% 1/4W F
				R572	1-249-393-11	CARBON	10 5% 1/4W F
				R573	1-249-417-11	CARBON	1K 5% 1/4W F
				R576	1-215-467-00	METAL	82K 1% 1/4W
				R584	1-249-441-11	CARBON	100K 5% 1/4W
				R587			

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

A E1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R589	1-249-437-11	CARBON	47K 5% 1/4W	C303	1-126-157-11	ELECT 10MF	20% 16V
R590	1-249-431-11	CARBON	15K 5% 1/4W	C304	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R592	1-249-429-11	CARBON	10K 5% 1/4W	C305	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
R593	1-215-878-00	METAL OXIDE	33K 5% 1W	C306	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R594	1-247-903-00	CARBON	1M 5% 1/4W				
R595	1-249-440-11	CARBON	82K 5% 1/4W	C309	1-164-505-11	CERAMIC CHIP 2.2MF	16V
R597	1-249-437-11	CARBON	47K 5% 1/4W	C310	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
R598	1-249-377-11	CARBON	0.47 5% 1/4W	C314	1-124-915-11	ELECT 10MF	20% 16V
R599	1-249-425-11	CARBON	4.7K 5% 1/4W	C315	1-164-505-11	CERAMIC CHIP 2.2MF	16V
R1401	1-215-444-00	METAL	9.1K 1% 1/4W	C319	1-126-157-11	ELECT 10MF	20% 16V
R1402	1-215-444-00	METAL	9.1K 1% 1/4W	C320	1-124-465-00	ELECT 0.47MF	20% 50V
R1403	1-215-430-00	METAL	2.4K 1% 1/4W	C321	1-163-125-00	CERAMIC CHIP 220PF	5% 50V
R1404	1-215-430-00	METAL	2.4K 1% 1/4W	C322	1-163-003-11	CERAMIC CHIP 330PF	10% 50V
R1405	1-249-385-11	CARBON	2.2 5% 1/4W	C323	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
R1406	1-249-385-11	CARBON	2.2 5% 1/4W	C324	1-124-234-00	ELECT 22MF	20% 16V
R1409	1-249-433-11	CARBON	22K 5% 1/4W	C325	1-104-563-11	FILM CHIP 0.1MF	5% 16V
R1410	1-249-433-11	CARBON	22K 5% 1/4W	C326	1-104-563-11	FILM CHIP 0.1MF	5% 16V
R1427	1-249-421-11	CARBON	2.2K 5% 1/4W	C327	1-104-563-11	FILM CHIP 0.1MF	5% 16V
R1428	1-249-421-11	CARBON	2.2K 5% 1/4W	C328	1-126-157-11	ELECT 10MF	20% 16V
R1439	1-247-883-00	CARBON	150K 5% 1/4W	C329	1-126-157-11	ELECT 10MF	20% 16V
R1501	1-215-449-00	METAL	15K 1% 1/4W	C330	1-126-157-11	ELECT 10MF	20% 16V
R1502	1-215-436-00	METAL	4.3K 1% 1/4W	C331	1-126-301-11	ELECT 1MF	20% 50V
R1503	1-249-425-11	CARBON	4.7K 5% 1/4W	C332	1-124-584-00	ELECT 100MF	20% 10V
R1505	1-249-433-11	CARBON	22K 5% 1/4W	C333	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V
R1506	1-218-642-11	METAL OXIDE	100K 5% 1W	C334	1-137-491-11	FILM CHIP 0.1MF	5% 25V
R1507	1-249-436-11	CARBON	39K 5% 1/4W	C335	1-136-169-00	FILM 0.22MF	5% 50V
R1508	1-215-453-00	METAL	22K 1% 1/4W	C336	1-126-301-11	ELECT 1MF	20% 50V
R1509	1-215-461-00	METAL	47K 1% 1/4W	C337	1-126-301-11	ELECT 1MF	20% 50V
R1510	1-249-383-11	CARBON	1.5 5% 1/4W	C338	1-124-584-00	ELECT 100MF	20% 10V
R1511	1-215-888-00	METAL OXIDE	220 5% 2W	C339	1-124-791-11	ELECT 1MF	20% 50V
R1512	1-216-371-00	METAL OXIDE	1.5 5% 2W	C340	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
R1513	1-249-436-11	CARBON	39K 5% 1/4W	C341	1-126-157-11	ELECT 10MF	20% 16V
R1550	1-215-881-11	METAL OXIDE	15 5% 2W	C342	1-124-465-00	ELECT 0.47MF	20% 50V
R4002	1-249-385-11	CARBON	2.2 5% 1/4W	C343	1-124-589-11	ELECT 47MF	20% 16V
R4003	1-216-361-00	METAL OXIDE	0.22 5% 2W	C344	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R4004	1-216-374-00	METAL OXIDE	2.7 5% 2W	C345	1-124-767-00	ELECT 2.2MF	20% 50V
R4006	1-216-396-11	METAL OXIDE	3.9 5% 3W	C346	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C347	1-136-169-00	FILM 0.22MF	5% 50V
				C348	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C349	1-126-301-11	ELECT 1MF	20% 50V
				C350	1-126-301-11	ELECT 1MF	20% 50V
				C351	1-163-002-11	CERAMIC CHIP 270PF	10% 50V
				C352	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V
				C353	1-126-163-11	ELECT 4.7MF	20% 50V
				C354	1-136-169-00	FILM 0.22MF	5% 50V
				C355	1-124-465-00	ELECT 0.47MF	20% 50V
				C356	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
				C357	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C358	1-124-767-00	ELECT 2.2MF	20% 50V
				C360	1-137-491-11	FILM CHIP 0.1MF	5% 25V
				C361	1-126-301-11	ELECT 1MF	20% 50V
				C362	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C363	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C364	1-126-301-11	ELECT 1MF	20% 50V
				C365	1-164-343-11	CERAMIC CHIP 0.056MF	10% 25V
				C366	1-124-257-00	ELECT 2.2MF	20% 50V
				C367	1-126-157-11	ELECT 10MF	20% 16V
				C368	1-124-234-00	ELECT 22MF	20% 16V
				C369	1-163-001-11	CERAMIC CHIP 220PF	10% 50V
				C370	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C371	1-124-126-00	ELECT 47MF	20% 16V
				C372	1-124-589-11	ELECT 47MF	20% 16V
				C373	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
				C378	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
				C379	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C301	1-163-010-11	CERAMIC CHIP 0.0012MF	10% 50V				

<SPARK GAP>

SG501 1-519-422-11 GAP, SPARK

<TRANSFORMER>

T501 Δ 1-439-513-11 TRANSFORMER ASSY. FLYBACK (NX 2602A3)
T503 1-437-217-11 TRANSFORMER, HORIZONTAL DRIVE
T505 1-413-059-00 TRANSFORMER, FERRITE (DFT)

<THERMISTOR>

THP150 1-807-970-11 THERMISTOR

<TUNER>

TU101A Δ 1-693-102-22 TUNER (BTF KA401)

*A-1346-132-A E1 BOARD, COMPLETE

<CAPACITOR>

E1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C380	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	Q316	8-729-422-27	TRANSISTOR 2SD601A-Q	
C381	1-163-101-00	CERAMIC CHIP 22PF	5% 50V	Q317	8-729-216-22	TRANSISTOR 2SA1162-G	
C382	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q321	8-729-925-79	TRANSISTOR IMX3	
C383	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q322	8-729-216-22	TRANSISTOR 2SA1162-G	
C384	1-163-095-00	CERAMIC CHIP 12PF	5% 50V	Q323	8-729-422-27	TRANSISTOR 2SD601A-Q	
<DIODE>				Q324	8-729-216-22	TRANSISTOR 2SA1162-G	
D301	8-719-404-46	DIODE MA110		Q325	8-729-216-22	TRANSISTOR 2SA1162-G	
D302	8-719-404-46	DIODE MA110		Q326	8-729-422-27	TRANSISTOR 2SD601A-Q	
D303	8-719-404-46	DIODE MA110		Q327	8-729-422-27	TRANSISTOR 2SD601A-Q	
D304	8-719-404-46	DIODE MA110		Q328	8-729-422-27	TRANSISTOR 2SD601A-Q	
D305	8-719-404-46	DIODE MA110		Q329	8-729-925-79	TRANSISTOR IMX3	
D306	8-719-158-15	DIODE RD5.6SB		Q330	8-729-925-79	TRANSISTOR IMX3	
D307	8-719-404-46	DIODE MA110		Q333	8-729-925-79	TRANSISTOR IMX3	
D310	8-719-158-15	DIODE RD5.6SB		Q334	8-729-422-27	TRANSISTOR 2SD601A-Q	
D312	8-719-404-46	DIODE MA110		Q335	8-729-907-46	TRANSISTOR IMZ1	
D313	8-719-404-46	DIODE MA110		Q340	8-729-422-27	TRANSISTOR 2SD601A-Q	
D314	8-719-404-46	DIODE MA110		Q342	8-729-925-79	TRANSISTOR IMX3	
D315	8-719-404-46	DIODE MA110		Q344	8-729-216-22	TRANSISTOR 2SA1162-G	
D316	8-719-404-46	DIODE MA110		<RESISTOR>			
D317	8-719-404-46	DIODE MA110		R301	1-216-025-00	METAL GLAZE 100 5%	1/10W
D318	8-719-404-46	DIODE MA110		R302	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
D319	8-719-404-46	DIODE MA110		R303	1-216-079-00	METAL GLAZE 18K 5%	1/10W
D320	8-719-404-46	DIODE MA110		R304	1-216-081-00	METAL GLAZE 22K 5%	1/10W
D321	8-719-400-94	DIODE MA3130		R305	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
<DELAY LINE>				R306	1-216-081-00	METAL GLAZE 22K 5%	1/10W
DL302	1-415-817-11	DELAY LINE		R307	1-216-089-00	METAL GLAZE 47K 5%	1/10W
<CONNECTOR>				R308	1-216-037-00	METAL GLAZE 330 5%	1/10W
E1-24	1-564-523-11	PLUG, CONNECTOR 8P		R309	1-216-073-00	METAL GLAZE 10K 5%	1/10W
E1-25	*1-564-521-11	PLUG, CONNECTOR 6P		R310	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
E1-26	*1-564-522-11	PLUG, CONNECTOR 7P		R312	1-216-043-00	METAL GLAZE 560 5%	1/10W
E1-001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P		R313	1-216-035-00	METAL GLAZE 270 5%	1/10W
<IC>				R314	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
IC301	8-752-058-68	IC CXA1315M		R316	1-216-035-00	METAL GLAZE 270 5%	1/10W
IC302	8-752-059-67	IC CXA1465AS		R317	1-216-121-00	METAL GLAZE 1M 5%	1/10W
IC303	8-759-106-02	IC UPC4570G2		R320	1-216-039-00	METAL GLAZE 390 5%	1/10W
<COIL>				R325	1-216-033-00	METAL GLAZE 220 5%	1/10W
L301	1-410-064-11	INDUCTOR 2.7MMH		R326	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
L307	1-410-944-31	INDUCTOR CHIP 15UH		R331	1-216-017-00	METAL GLAZE 47 5%	1/10W
L308	1-410-946-31	INDUCTOR CHIP 22UH		R332	1-216-657-11	METAL CHIP 1.8K 0.50%	1/10W
<TRANSISTOR>				R333	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W
Q301	8-729-925-79	TRANSISTOR IMX3		R336	1-216-047-00	METAL GLAZE 820 5%	1/10W
Q302	8-729-925-79	TRANSISTOR IMX3		R338	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q		R339	1-216-047-00	METAL GLAZE 820 5%	1/10W
Q304	8-729-907-46	TRANSISTOR IMZ1		R340	1-216-651-11	METAL CHIP 1K 0.50%	1/10W
Q305	8-729-925-79	TRANSISTOR IMX3		R341	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q306	8-729-422-27	TRANSISTOR 2SD601A-Q		R343	1-216-077-00	METAL GLAZE 15K 5%	1/10W
Q307	8-729-903-10	TRANSISTOR FMW1		R344	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q309	8-729-422-27	TRANSISTOR 2SD601A-Q		R345	1-216-292-11	METAL GLAZE 8.2M 5%	1/8W
Q310	8-729-422-27	TRANSISTOR 2SD601A-Q		R346	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q311	8-729-403-27	TRANSISTOR XN4401		R347	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q		R348	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q314	8-729-403-27	TRANSISTOR XN4401		R349	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q315	8-729-422-27	TRANSISTOR 2SD601A-Q		R350	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R351	1-216-674-11	METAL CHIP 9.1K 0.50%	1/10W
				R352	1-216-011-00	METAL GLAZE 27 5%	1/10W
				R353	1-216-001-00	METAL GLAZE 10 5%	1/10W
				R354	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R355	1-216-001-00	METAL GLAZE 10 5%	1/10W
				R356	1-216-001-00	METAL GLAZE 10 5%	1/10W
				R357	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R358	1-216-049-00	METAL GLAZE 1K 5%	1/10W

E1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R359	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1325	1-216-025-00	METAL GLAZE	100 5% 1/10W
R360	1-216-119-00	METAL GLAZE	820K 5% 1/10W	R1326	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R361	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1327	1-216-033-00	METAL GLAZE	220 5% 1/10W
R362	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R1328	1-216-033-00	METAL GLAZE	220 5% 1/10W
R363	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1329	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R364	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1330	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R365	1-216-017-00	METAL GLAZE	47 5% 1/10W	R1331	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R366	1-216-001-00	METAL GLAZE	10 5% 1/10W	R1332	1-216-093-00	METAL GLAZE	68K 5% 1/10W
R367	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1333	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R368	1-216-001-00	METAL GLAZE	10 5% 1/10W	R1334	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R369	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1335	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R370	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1336	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R371	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1337	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R372	1-216-031-00	METAL GLAZE	180 5% 1/10W	R1338	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R373	1-216-671-11	METAL CHIP	6.8K 0.50% 1/10W	R1339	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R374	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1340	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R375	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1342	1-216-033-00	METAL GLAZE	220 5% 1/10W
R376	1-216-037-00	METAL GLAZE	330 5% 1/10W	R1343	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R377	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1344	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R378	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1345	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R379	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1346	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R380	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1347	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R381	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1348	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R382	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1349	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R383	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W	R1350	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R384	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1351	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R385	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1352	1-216-039-00	METAL GLAZE	390 5% 1/10W
R386	1-216-687-11	METAL CHIP	33K 0.50% 1/10W	R1353	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R387	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1354	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R388	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1355	1-216-017-00	METAL GLAZE	47 5% 1/10W
R389	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1356	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R390	1-216-033-00	METAL GLAZE	220 5% 1/10W	R1357	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R391	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1358	1-216-033-00	METAL GLAZE	220 5% 1/10W
R393	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	R1362	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R394	1-216-109-00	METAL GLAZE	330K 5% 1/10W	R1363	1-216-041-00	METAL GLAZE	470 5% 1/10W
R395	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R1364	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R396	1-216-105-00	METAL GLAZE	220K 5% 1/10W	R1373	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R397	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1374	1-216-025-00	METAL GLAZE	100 5% 1/10W
R398	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1379	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R399	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R1380	1-216-075-00	METAL GLAZE	12K 5% 1/10W
R1301	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1381	1-216-041-00	METAL GLAZE	470 5% 1/10W
R1302	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1382	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R1303	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R1383	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R1304	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1384	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R1305	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1385	1-216-037-00	METAL GLAZE	330 5% 1/10W
R1306	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1386	1-216-037-00	METAL GLAZE	330 5% 1/10W
R1307	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1387	1-216-045-00	METAL GLAZE	680 5% 1/10W
R1308	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1388	1-216-001-00	METAL GLAZE	10 5% 1/10W
R1309	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1389	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R1310	1-216-045-00	METAL GLAZE	680 5% 1/10W	R1390	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R1311	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1391	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R1312	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1392	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1313	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1394	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1314	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1395	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1315	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1396	1-216-125-00	METAL GLAZE	1.5M 5% 1/10W
R1316	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1399	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1317	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R5301	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R1318	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R5302	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1319	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R5303	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R1320	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R5304	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R1321	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R5305	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R1322	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
R1323	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R1324	1-216-045-00	METAL GLAZE	680 5% 1/10W				

E1 E2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<CRYSTAL>				E2-46	*1-564-518-11	PLUG, CONNECTOR 3P	
X301	1-567-505-11	OSCILLATOR, CRYSTAL 3.95MHZ		E2-002	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	
*****				<IC>			
*A-1346-137-A	E2 BOARD, COMPLETE	*****		IC2301	8-759-066-52	IC PCA8510T/012-T	
<CAPACITOR>				IC2303	8-759-925-75	IC SN74HC05ANS	
C2302	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	IC2304	8-752-037-15	IC CXA1387S	
C2303	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	IC2306	8-759-011-65	IC MC74HC4053F	
C2310	1-163-105-00	CERAMIC CHIP 33PF	5% 50V	IC2307	8-752-058-68	IC CXA1315N	
C2314	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	<COIL>			
C2315	1-126-157-11	ELECT 10MF	20% 16V	L2304	1-408-414-00	INDUCTOR 27UH	
C2316	1-126-157-11	ELECT 10MF	20% 16V	<TRANSISTOR>			
C2317	1-126-157-11	ELECT 10MF	20% 16V	Q2301	8-729-903-10	TRANSISTOR FMW1	
C2318	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2303	8-729-403-27	TRANSISTOR XN4401	
C2320	1-124-589-11	ELECT 47MF	20% 16V	Q2304	8-729-925-79	TRANSISTOR IMX3	
C2321	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	Q2305	8-729-903-10	TRANSISTOR FMW1	
C2322	1-124-234-00	ELECT 22MF	20% 16V	Q2306	8-729-403-27	TRANSISTOR XN4401	
C2323	1-124-234-00	ELECT 22MF	20% 16V	Q2307	8-729-403-27	TRANSISTOR XN4401	
C2324	1-124-234-00	ELECT 22MF	20% 16V	Q2308	8-729-403-27	TRANSISTOR XN4401	
C2325	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2309	8-729-903-10	TRANSISTOR FMW1	
C2326	1-124-589-11	ELECT 47MF	20% 16V	Q2310	8-729-403-27	TRANSISTOR XN4401	
C2327	1-164-505-11	CERAMIC CHIP 2.2MF	10% 16V	Q2311	8-729-903-10	TRANSISTOR FMW1	
C2328	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2312	8-729-403-27	TRANSISTOR XN4401	
C2329	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2313	8-729-903-10	TRANSISTOR FMW1	
C2331	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2314	8-729-403-27	TRANSISTOR XN4401	
C2332	1-124-234-00	ELECT 22MF	20% 16V	Q2315	8-729-903-10	TRANSISTOR FMW1	
C2333	1-124-234-00	ELECT 22MF	20% 16V	Q2317	8-729-216-22	TRANSISTOR 2SA1162-G	
C2334	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2318	8-729-216-22	TRANSISTOR 2SA1162-G	
C2335	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2319	8-729-216-22	TRANSISTOR 2SA1162-G	
C2336	1-126-163-11	ELECT 4.7MF	20% 16V	Q2320	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2337	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2321	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2338	1-163-038-00	CERAMIC CHIP 0.1MF	5% 25V	Q2322	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2340	1-216-133-00	METAL GLAZE 3.3M	5% 1/10W	Q2324	8-729-216-22	TRANSISTOR 2SA1162-G	
C2341	1-135-217-21	TANTAL. CHIP 15MF	20% 6.3V	Q2326	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2345	1-164-505-11	CERAMIC CHIP 2.2MF	10% 16V	Q2327	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2346	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2328	8-729-925-79	TRANSISTOR IMX3	
C2347	1-163-367-11	CERAMIC CHIP 39PF	5% 50V	Q2329	8-729-925-79	TRANSISTOR IMX3	
C2349	1-164-505-11	CERAMIC CHIP 2.2MF	10% 16V	Q2330	8-729-903-10	TRANSISTOR FMW1	
C2350	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2336	8-729-925-79	TRANSISTOR IMX3	
C2351	1-164-505-11	CERAMIC CHIP 2.2MF	10% 16V	Q2337	8-729-925-79	TRANSISTOR IMX3	
C2352	1-164-505-11	CERAMIC CHIP 2.2MF	10% 16V	Q2339	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2353	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2340	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2354	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q2341	8-729-422-27	TRANSISTOR 2SD601A-Q	
C2357	1-126-301-11	ELECT 1MF	20% 50V	<RESISTOR>			
C2360	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	R2302	1-216-049-00	METAL GLAZE 1K	5% 1/10W
<DIODE>				R2303	1-216-049-00	METAL GLAZE 1K	5% 1/10W
D2306	8-719-404-46	DIODE MA110		R2304	1-216-049-00	METAL GLAZE 1K	5% 1/10W
D2307	8-719-946-98	DIODE FMN1		R2305	1-216-033-00	METAL GLAZE 220	5% 1/10W
D2308	8-719-946-98	DIODE FMN1		R2306	1-216-045-00	METAL GLAZE 680	5% 1/10W
D2309	8-719-404-46	DIODE MA110		R2307	1-216-045-00	METAL GLAZE 680	5% 1/10W
D2312	8-719-404-46	DIODE MA110		R2308	1-216-045-00	METAL GLAZE 680	5% 1/10W
D2313	8-719-404-46	DIODE MA110		R2309	1-216-041-00	METAL GLAZE 470	5% 1/10W
D2314	8-713-300-57	DIODE 1T33		R2310	1-216-055-00	METAL GLAZE 1.8K	5% 1/10W
D2317	8-719-404-46	DIODE MA110		R2311	1-216-025-00	METAL GLAZE 100	5% 1/10W
<CONNECTOR>				R2312	1-216-043-00	METAL GLAZE 560	5% 1/10W
E2-25	*1-564-521-11	PLUG, CONNECTOR 6P		R2313	1-216-055-00	METAL GLAZE 1.8K	5% 1/10W
E2-26	*1-564-522-11	PLUG, CONNECTOR 7P		R2314	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W

E2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R2315	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R2387	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2317	1-216-041-00	METAL GLAZE	470 5% 1/10W	R2388	1-216-017-00	METAL GLAZE	47 5% 1/10W
R2318	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W	R2389	1-216-206-00	METAL GLAZE	2.2K 5% 1/8W
R2319	1-216-079-00	METAL GLAZE	18K 5% 1/10W	R2390	1-216-043-00	METAL GLAZE	560 5% 1/10W
R2320	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R2392	1-216-206-00	METAL GLAZE	2.2K 5% 1/8W
R2321	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R2393	1-216-017-00	METAL GLAZE	47 5% 1/10W
R2322	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R2394	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2323	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R2395	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2324	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R2396	1-216-206-00	METAL GLAZE	2.2K 5% 1/8W
R2325	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R2397	1-216-043-00	METAL GLAZE	560 5% 1/10W
R2326	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R2399	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2327	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R3301	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2328	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3302	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2329	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3303	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R2330	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R3304	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R2331	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R3306	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R2332	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3307	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R2333	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R3308	1-216-043-00	METAL GLAZE	560 5% 1/10W
R2334	1-216-295-00	METAL GLAZE	0 5% 1/10W	R3309	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2335	1-216-295-00	METAL GLAZE	0 5% 1/10W	R3310	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2336	1-216-295-00	METAL GLAZE	0 5% 1/10W	R3311	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2337	1-216-033-00	METAL GLAZE	220 5% 1/10W	R3312	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2338	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3313	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R2340	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3314	1-216-689-11	METAL GLAZE	39K 5% 1/10W
R2341	1-216-041-00	METAL GLAZE	470 5% 1/10W	R3315	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R2342	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3316	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R2343	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3318	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R2344	1-216-033-00	METAL GLAZE	220 5% 1/10W	R3319	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R2345	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R3320	1-216-017-00	METAL GLAZE	47 5% 1/10W
R2346	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R3321	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R2347	1-216-083-00	METAL GLAZE	27K 5% 1/10W	R3323	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R2348	1-216-655-11	METAL CHIP	1.5K 0.50% 1/10W	R3324	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2349	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3325	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2350	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R3328	1-216-001-00	METAL GLAZE	10 5% 1/10W
R2351	1-216-033-00	METAL GLAZE	220 5% 1/10W	R3330	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2352	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R3331	1-216-033-00	METAL GLAZE	220 5% 1/10W
R2353	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R3332	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2354	1-216-210-00	METAL GLAZE	3.3K 5% 1/8W	R3333	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W
R2355	1-216-178-00	METAL GLAZE	150 5% 1/8W	R3334	1-216-661-11	METAL CHIP	2.7K 0.50% 1/10W
R2356	1-216-677-11	METAL CHIP	12K 0.50% 1/10W	R3335	1-216-025-00	METAL GLAZE	100 5% 1/10W
R2357	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W	R3336	1-216-683-11	METAL CHIP	22K 0.50% 1/10W
R2359	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3337	1-216-685-11	METAL CHIP	27K 0.50% 1/10W
R2360	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3339	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R2361	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3340	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2362	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3341	1-216-677-11	METAL CHIP	12K 0.50% 1/10W
R2363	1-216-041-00	METAL GLAZE	470 5% 1/10W	R3342	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W
R2364	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3343	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2365	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	R3344	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2366	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3347	1-216-687-11	METAL CHIP	33K 0.50% 1/10W
R2367	1-216-043-00	METAL GLAZE	560 5% 1/10W	R3348	1-216-681-11	METAL CHIP	18K 0.50% 1/10W
R2368	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3349	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2371	1-216-033-00	METAL GLAZE	220 5% 1/10W	R3350	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R2374	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R3351	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R2375	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3352	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R2376	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3353	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R2377	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3354	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R2378	1-216-025-00	METAL GLAZE	100 5% 1/10W	R3356	1-216-655-11	METAL CHIP	1.5K 0.50% 1/10W
R2379	1-216-043-00	METAL GLAZE	560 5% 1/10W	R3357	1-216-654-11	METAL CHIP	1.3K 0.50% 1/10W
R2380	1-216-043-00	METAL GLAZE	560 5% 1/10W	R3358	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W
R2381	1-216-043-00	METAL GLAZE	560 5% 1/10W	R3359	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W
R2382	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R3360	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R2384	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R3361	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R2385	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R3362	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R2386	1-216-049-00	METAL GLAZE	1K 5% 1/10W				

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DESCRIPTION

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DESCRIPTION

REMARK

R7312	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R7313	1-216-047-00	METAL GLAZE	820	5%	1/10W
R7314	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

<CRYSTAL>

X2301 1-577-071-11 VIBRATOR, CERAMIC 4MHZ

*A-1306-436-A M BOARD, COMPLETE

<CAPACITOR>

C048	1-124-261-00	ELECT	10MF	20%	50V
C049	1-124-261-00	ELECT	10MF	20%	50V
C055	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C064	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C065	1-124-257-00	ELECT	2.2MF	20%	50V

<DIODE>

D001	8-719-404-46	DIODE MA110
D002	8-719-404-46	DIODE MA110

<IC>

IC001 8-759-169-06 IC TMC73C247-10
IC002 8-759-403-44 IC MN1280-S

<COIL>

LO01	1-408-409-00	INDUCTOR	10UH
LO02	1-410-476-11	INDUCTOR	33UH

<CONNECTOR>

M-39 *1-564-521-11 PLUG, CONNECTOR 6P
M-45 *1-564-523-11 PLUG, CONNECTOR 8P
M-001 1-573-965-21 PIN. CONNECTOR (PC BOARD) 50P

<TRANSISTOR>

Q001	8-729-216-22	TRANSISTOR	2SA1162-G
Q009	8-729-422-27	TRANSISTOR	2SD601A-Q
Q010	8-729-422-27	TRANSISTOR	2SD601A-Q
Q011	8-729-422-27	TRANSISTOR	2SD601A-Q
Q012	8-729-422-27	TRANSISTOR	2SD601A-Q

Q013 8-729-216-22 TRANSISTOR 2SA1162-G
Q014 8-729-422-27 TRANSISTOR 2SD601A-Q

<RESISTOR>

R040	1-216-089-00	METAL GLAZE	47K	5%	1/10
R041	1-216-057-00	METAL GLAZE	2.2K	5%	1/10
R042	1-216-065-00	METAL GLAZE	4.7K	5%	1/10
R043	1-216-033-00	METAL GLAZE	220	5%	1/10

M P1

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R044	1-216-033-00	METAL GLAZE	220 5% 1/10W	*A-1195-066-A P1 BOARD, COMPLETE *****			
R045	1-216-025-00	METAL GLAZE	100 5% 1/10W	<CAPACITOR>			
R046	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3001	1-124-589-11	ELECT 47MF	20% 16V
R047	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3002	1-164-346-11	CERAMIC CHIP 1MF	16V
R048	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3003	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R049	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3004	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
R050	1-216-295-00	METAL GLAZE	0 5% 1/10W	C3005	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
R051	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3006	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R052	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3007	1-164-005-11	CERAMIC CHIP 0.47MF	25V
R053	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3008	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R054	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C3009	1-124-925-11	ELECT 2.2MF	20% 50V
R055	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C3010	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V
R056	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3011	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V
R057	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3012	1-164-336-11	CERAMIC CHIP 0.33MF	25V
R058	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3013	1-164-222-11	CERAMIC CHIP 0.22MF	25V
R059	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C3014	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R060	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3015	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R063	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3016	1-163-107-00	CERAMIC CHIP 39PF	5% 50V
R064	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C3017	1-130-495-00	MYLAR 0.1MF	5% 50V
R065	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3018	1-163-115-00	CERAMIC CHIP 82PF	5% 50V
R066	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3019	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R067	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3020	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
R068	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3021	1-163-115-00	CERAMIC CHIP 82PF	5% 50V
R069	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C3022	1-126-301-11	ELECT 1MF	20% 50V
R070	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3023	1-124-589-11	ELECT 47MF	20% 16V
R071	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3024	1-163-018-00	CERAMIC CHIP 0.0056MF	10% 50V
R072	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3025	1-164-343-11	CERAMIC CHIP 0.056MF	10% 25V
R073	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	C3026	1-126-163-11	ELECT 4.7MF	20% 50V
R074	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3027	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V
R075	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3028	1-124-589-11	ELECT 47MF	20% 16V
R076	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C3029	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
R077	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	C3030	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V
R078	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3031	1-126-177-11	ELECT 100MF	20% 6.3V
R079	1-216-025-00	METAL GLAZE	100 5% 1/10W	C3032	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R080	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	C3033	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R081	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3034	1-164-336-11	CERAMIC CHIP 0.33MF	25V
R082	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3035	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R083	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3036	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R084	1-216-097-00	METAL GLAZE	100K 5% 1/10W	C3037	1-124-589-11	ELECT 47MF	20% 16V
R085	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3038	1-136-287-11	FILM 0.0047MF	5% 50V
R086	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3039	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R087	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3040	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R088	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3042	1-164-346-11	CERAMIC CHIP 1MF	16V
R089	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C3043	1-124-465-00	ELECT 0.47MF	20% 50V
R090	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3044	1-126-301-11	ELECT 1MF	20% 50V
R091	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3045	1-124-589-11	ELECT 47MF	20% 16V
R092	1-216-077-00	METAL GLAZE	15K 5% 1/10W	C3046	1-126-301-11	ELECT 1MF	20% 50V
R093	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3047	1-126-301-11	ELECT 1MF	20% 50V
R094	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3048	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R095	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C3051	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R096	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3052	1-126-177-11	ELECT 100MF	20% 6.3V
R097	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3053	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R098	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C3054	1-126-177-11	ELECT 100MF	20% 6.3V
R099	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C3055	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
R100	1-216-025-00	METAL GLAZE	100 5% 1/10W	C3057	1-124-589-11	ELECT 47MF	20% 16V
R101	1-216-025-00	METAL GLAZE	100 5% 1/10W	C3058	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
R102	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C3059	1-164-222-11	CERAMIC CHIP 0.22MF	25V
R103	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3060	1-124-589-11	ELECT 47MF	20% 16V
R104	1-216-033-00	METAL GLAZE	220 5% 1/10W	C3064	1-163-123-00	CERAMIC CHIP 180PF	5% 50V
<CRYSTAL>							
X001	1-579-743-11	VIBRATOR, CRYSTAL 6MHZ					

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C3065	1-124-589-11	ELECT 47MF	20% 16V	Q3011	8-729-216-22	TRANSISTOR 2SA1162-G	
C3066	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	Q3012	8-729-422-27	TRANSISTOR 2SD601A-Q	
C3067	1-124-589-11	ELECT 47MF	20% 16V	Q3013	8-729-422-27	TRANSISTOR 2SD601A-Q	
C3069	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	Q3014	8-729-422-27	TRANSISTOR 2SD601A-Q	
C3070	1-126-177-11	ELECT 100MF	20% 6.3V	Q3100	8-729-216-22	TRANSISTOR 2SA1162-G	
C3071	1-124-589-11	ELECT 47MF	20% 16V	<RESISTOR>			
C3072	1-124-589-11	ELECT 47MF	20% 16V	JR3	1-216-295-00	METAL GLAZE 0 5%	1/10W
C3073	1-124-589-11	ELECT 47MF	20% 16V	R3001	1-216-085-00	METAL GLAZE 33K 5%	1/10W
C3074	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	R3002	1-216-089-00	METAL GLAZE 47K 5%	1/10W
C3076	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R3003	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
C3077	1-164-005-11	CERAMIC CHIP 0.47MF	25V	R3004	1-216-091-00	METAL GLAZE 56K 5%	1/10W
C3081	1-163-095-00	CERAMIC CHIP 12PF	5% 50V	R3005	1-216-689-11	METAL GLAZE 39K 5%	1/10W
C3100	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	R3006	1-216-097-00	METAL GLAZE 100K 5%	1/10W
C3101	1-163-115-00	CERAMIC CHIP 82PF	5% 50V	R3007	1-216-079-00	METAL GLAZE 18K 5%	1/10W
<CONNECTOR>				R3008	1-216-073-00	METAL GLAZE 10K 5%	1/10W
CN151	*1-573-965-11	PIN, CONNECTOR (PC BOARD) 50P		R3009	1-216-041-00	METAL GLAZE 470 5%	1/10W
<DIODE>				R3010	1-216-049-00	METAL GLAZE 1K 5%	1/10W
D3003	8-719-158-15	DIODE RD5.6SB		R3011	1-216-073-00	METAL GLAZE 10K 5%	1/10W
D3004	8-719-404-46	DIODE MA110		R3012	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
D3009	8-719-404-46	DIODE MA110		R3013	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
<IC>				R3014	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
IC3001	8-759-046-25	IC TDA3769		R3015	1-216-049-00	METAL GLAZE 1K 5%	1/10W
IC3002	8-759-009-46	IC MC14528BF		R3017	1-216-083-00	METAL GLAZE 27K 5%	1/10W
IC3003	8-759-513-48	IC TDA2595/V9		R3018	1-216-097-00	METAL GLAZE 100K 5%	1/10W
IC3004	8-759-088-90	IC SDA9187X		R3019	1-216-077-00	METAL GLAZE 15K 5%	1/10W
IC3005	8-759-088-91	IC SDA9188X		R3020	1-216-099-00	METAL GLAZE 120K 5%	1/10W
IC3006	8-759-112-06	IC UPC78N05H		R3021	1-216-075-00	METAL GLAZE 12K 5%	1/10W
IC3007	8-759-046-27	IC SDA9086-3		R3023	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
IC3008	8-759-112-06	IC UPC78N05H		R3025	1-216-015-00	METAL GLAZE 39 5%	1/10W
<COIL>				R3026	1-216-041-00	METAL GLAZE 470 5%	1/10W
L3001	1-410-476-11	INDUCTOR 33UH		R3027	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
L3002	1-408-424-00	INDUCTOR 180UH		R3028	1-216-027-00	METAL GLAZE 120 5%	1/10W
L3003	1-408-424-00	INDUCTOR 180UH		R3030	1-216-073-00	METAL GLAZE 10K 5%	1/10W
L3004	1-410-470-11	INDUCTOR 10UH		R3031	1-216-047-00	METAL GLAZE 820 5%	1/10W
L3005	1-410-472-41	INDUCTOR 15UH		R3032	1-216-041-00	METAL GLAZE 470 5%	1/10W
L3006	1-412-788-41	INDUCTOR 10UH		R3033	1-216-295-00	METAL GLAZE 0 5%	1/10W
L3007	1-410-472-41	INDUCTOR 15UH		R3034	1-216-041-00	METAL GLAZE 470 5%	1/10W
L3008	1-410-472-41	INDUCTOR 15UH		R3035	1-216-045-00	METAL GLAZE 680 5%	1/10W
L3009	1-410-472-41	INDUCTOR 15UH		R3036	1-216-045-00	METAL GLAZE 680 5%	1/10W
L3010	1-410-466-41	INDUCTOR 4.7UH		R3037	1-216-083-00	METAL GLAZE 27K 5%	1/10W
L3011	1-410-470-11	INDUCTOR 10UH		R3038	1-216-049-00	METAL GLAZE 1K 5%	1/10W
L3012	1-410-676-31	INDUCTOR 150UH		R3039	1-216-073-00	METAL GLAZE 10K 5%	1/10W
L3013	1-412-911-11	INDUCTOR, FERRITE BEAD		R3040	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
L3014	1-412-911-11	INDUCTOR, FERRITE BEAD		R3041	1-216-073-00	METAL GLAZE 10K 5%	1/10W
L3015	1-412-911-11	INDUCTOR, FERRITE BEAD		R3042	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
L3100	1-410-392-11	INDUCTOR 82UH		R3043	1-216-099-00	METAL GLAZE 120K 5%	1/10W
<TRANSISTOR>				R3044	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q3003	8-729-216-22	TRANSISTOR 2SA1162-G		R3045	1-216-295-00	METAL GLAZE 0 5%	1/10W
Q3004	8-729-422-27	TRANSISTOR 2SD601A-Q		R3050	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q3006	8-729-422-27	TRANSISTOR 2SD601A-Q		R3052	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q3007	8-729-216-22	TRANSISTOR 2SA1162-G		R3053	1-216-037-00	METAL GLAZE 330 5%	1/10W
Q3008	8-729-422-27	TRANSISTOR 2SD601A-Q		R3055	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
Q3009	8-729-216-22	TRANSISTOR 2SA1162-G		R3056	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
Q3010	8-729-422-27	TRANSISTOR 2SD601A-Q		R3057	1-216-081-00	METAL GLAZE 22K 5%	1/10W
				R3058	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R3059	1-216-079-00	METAL GLAZE 18K 5%	1/10W
				R3060	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
				R3061	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R3062	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R3063	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R3064	1-216-295-00	METAL GLAZE 0 5%	1/10W

P1 X2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R3065	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C2519	1-126-301-11	ELECT 1MF	20% 50V
R3066	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C2520	1-126-163-11	ELECT 4.7MF	20% 50V
R3067	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R3069	1-216-689-11	METAL GLAZE	39K 5% 1/10W	C2521	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
R3071	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2522	1-124-252-00	ELECT 0.33MF	20% 50V
				C2523	1-126-163-11	ELECT 4.7MF	20% 50V
R3073	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2524	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3074	1-216-295-00	METAL GLAZE	0 5% 1/10W	C2525	1-126-163-11	ELECT 4.7MF	20% 50V
R3075	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3076	1-216-043-00	METAL GLAZE	560 5% 1/10W	C2526	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3077	1-216-037-00	METAL GLAZE	330 5% 1/10W	C2527	1-126-157-11	ELECT 10MF	20% 16V
				C2528	1-124-465-00	ELECT 0.47MF	20% 50V
R3078	1-216-044-00	METAL GLAZE	620 5% 1/10W	C2529	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V
R3079	1-216-040-00	METAL GLAZE	430 5% 1/10W	C2530	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
R3082	1-216-029-00	METAL GLAZE	150 5% 1/10W				
R3084	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2531	1-126-301-11	ELECT 1MF	20% 50V
R3085	1-216-119-00	METAL GLAZE	820K 5% 1/10W	C2532	1-126-301-11	ELECT 1MF	20% 50V
				C2533	1-124-261-00	ELECT 10MF	20% 50V
R3086	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C2534	1-163-257-11	CERAMIC CHIP 180PF	5% 50V
R3087	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C2535	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3088	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R3089	1-216-033-00	METAL GLAZE	220 5% 1/10W	C2536	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3090	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C2537	1-126-163-11	ELECT 4.7MF	20% 50V
				C2538	1-126-163-11	ELECT 4.7MF	20% 50V
R3091	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C2539	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R3092	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C2540	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R3098	1-216-296-00	METAL GLAZE	0 5% 1/8W				
R3099	1-216-296-00	METAL GLAZE	0 5% 1/8W	C2541	1-163-139-00	CERAMIC CHIP 820PF	5% 50V
R3100	1-216-296-00	METAL GLAZE	0 5% 1/8W	C2542	1-124-478-11	ELECT 100MF	20% 25V
				C2543	1-124-252-00	ELECT 0.33MF	20% 50V
R3101	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	C2544	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
R3102	1-216-047-00	METAL GLAZE	820 5% 1/10W	C2545	1-126-301-11	ELECT 1MF	20% 50V
R3103	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R3104	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2546	1-126-163-11	ELECT 4.7MF	20% 50V
				C2547	1-126-163-11	ELECT 4.7MF	20% 25V
				C2548	1-163-809-11	CERAMIC CHIP 0.047MF	10% 25V
				C2549	1-126-163-11	ELECT 4.7MF	20% 50V
				C2550	1-126-163-11	ELECT 4.7MF	20% 25V
				C2551	1-126-301-11	ELECT 1MF	20% 50V
				C2552	1-126-163-11	ELECT 4.7MF	20% 50V
				C2553	1-126-301-11	ELECT 1MF	20% 50V
				C2554	1-124-234-00	ELECT 22MF	20% 16V
				C2555	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C2556	1-124-257-00	ELECT 2.2MF	20% 50V
				C2557	1-124-234-00	ELECT 22MF	20% 16V
				C2558	1-126-301-11	ELECT 1MF	20% 50V
				C2559	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C2560	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
				C2561	1-126-301-11	ELECT 1MF	20% 50V
				C2562	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
				C2563	1-163-257-11	CERAMIC CHIP 180PF	5% 50V
				C2564	1-126-301-11	ELECT 1MF	20% 50V
				C2565	1-126-163-11	ELECT 4.7MF	20% 50V
				C2566	1-126-163-11	ELECT 4.7MF	20% 50V
				C2567	1-126-163-11	ELECT 4.7MF	20% 50V
				C2568	1-163-263-11	CERAMIC CHIP 330PF	5% 50V
				C2569	1-163-257-11	CERAMIC CHIP 180PF	5% 50V
				C2570	1-124-234-00	ELECT 22MF	20% 16V
				C2571	1-126-301-11	ELECT 1MF	20% 50V
				C2572	1-126-163-11	ELECT 4.7MF	20% 50V
				C2573	1-124-234-00	ELECT 22MF	20% 16V
				C2574	1-126-301-11	ELECT 1MF	20% 50V
				C2575	1-126-301-11	ELECT 1MF	20% 50V
				C2576	1-126-301-11	ELECT 1MF	20% 50V
				C2577	1-126-163-11	ELECT 4.7MF	20% 50V
				C2578	1-126-163-11	ELECT 4.7MF	20% 50V
				C2579	1-126-103-11	ELECT 470MF	20% 16V
				C2580	1-124-478-11	ELECT 100MF	20% 25V
				C2581	1-163-109-00	CERAMIC CHIP 47PF	5% 50V

<VARIABLE RESISTOR>

RV3001 1-241-630-11 RES, ADJ, CARBON 10K
RV3002 1-238-019-11 RES, ADJ, CARBON 47K
RV3003 1-241-630-11 RES, ADJ, CARBON 10K

<CRYSTAL>

X3001 1-567-505-11~ OSCILLATOR, CRYSTAL 3.58MHZ

*A-1394-444-A X2 BOARD, COMPLETE

<CAPACITOR>

C2501 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2502 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2503 1-163-001-11 CERAMIC CHIP 220PF 10% 50V
C2504 1-126-163-11 ELECT 4.7MF 20% 50V
C2505 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2506 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2507 1-163-017-00 CERAMIC CHIP 0.0047MF 10% 50V
C2508 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2509 1-163-020-00 CERAMIC CHIP 0.0082MF 10% 50V
C2510 1-163-989-11 CERAMIC CHIP 0.033MF 10% 25V
C2511 1-164-004-11 CERAMIC CHIP 0.1MF 10% 25V
C2512 1-164-004-11 CERAMIC CHIP 0.1MF 10% 25V
C2513 1-164-004-11 CERAMIC CHIP 0.1MF 10% 25V
C2514 1-164-004-11 CERAMIC CHIP 0.1MF 10% 25V
C2515 1-164-004-11 CERAMIC CHIP 0.1MF 10% 25V
C2516 1-164-232-11 CERAMIC CHIP 0.01MF 10% 50V
C2517 1-126-157-11 ELECT 10MF 20% 16V
C2518 1-126-163-11 ELECT 4.7MF 20% 50V

KV-32XBR26/32XBR36

RM-Y112A TDR-IF310/RM-Y113A

X2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C2582	1-124-477-11	ELECT 47MF	20% 25V	R2527	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W
C2583	1-126-163-11	ELECT 4.7MF	20% 50V	R2528	1-216-081-00	METAL GLAZE 22K 5%	1/10W
C2584	1-163-109-00	CERAMIC CHIP 47PF	5% 50V	R2529	1-216-081-00	METAL GLAZE 22K 5%	1/10W
C2585	1-126-163-11	ELECT 4.7MF	20% 50V	R2530	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W
C2586	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	R2531	1-216-089-00	METAL GLAZE 47K 5%	1/10W
C2587	1-126-163-11	ELECT 4.7MF	20% 50V	R2532	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W
C2588	1-126-163-11	ELECT 4.7MF	20% 50V	R2533	1-216-089-00	METAL GLAZE 47K 5%	1/10W
C2589	1-126-163-11	ELECT 4.7MF	20% 50V	R2534	1-216-073-00	METAL GLAZE 10K 5%	1/10W
C2590	1-126-163-11	ELECT 4.7MF	20% 50V	R2535	1-216-073-00	METAL GLAZE 10K 5%	1/10W
C2591	1-124-478-11	ELECT 100MF	20% 25V	R2536	1-216-129-00	METAL GLAZE 2.2M 5%	1/10W
<DIODE>				R2537	1-216-077-00	METAL GLAZE 15K 5%	1/10W
D2501	8-719-104-24	DIODE 1S2835-T1		R2539	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
D2502	8-719-106-88	DIODE RD15M-B1		R2540	1-216-075-00	METAL GLAZE 12K 5%	1/10W
D2503	8-719-106-88	DIODE RD15M-B1		R2541	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
D2504	8-719-106-88	DIODE RD15M-B1		R2542	1-216-081-00	METAL GLAZE 22K 5%	1/10W
<IC>				R2543	1-216-081-00	METAL GLAZE 22K 5%	1/10W
IC2501	8-759-031-31	IC MC33174M		R2544	1-216-073-00	METAL GLAZE 10K 5%	1/10W
IC2502	8-752-050-75	IC CXA1373Q		R2545	1-216-048-00	METAL GLAZE 910 5%	1/10W
IC2503	8-759-604-70	IC M51523AL		R2546	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W
IC2504	8-759-031-31	IC MC33174M		R2547	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W
IC2505	8-759-604-70	IC M51523AL		R2548	1-216-073-00	METAL GLAZE 10K 5%	1/10W
IC2506	8-759-106-22	IC UPD4052BG		R2549	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
IC2507	8-759-038-68	IC MC33172ML		R2550	1-216-088-00	METAL GLAZE 43K 5%	1/10W
IC2508	8-759-038-68	IC MC33172ML		R2551	1-216-088-00	METAL GLAZE 43K 5%	1/10W
<JACK>				R2552	1-216-049-00	METAL GLAZE 1K 5%	1/10W
J2501	*1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P		R2553	1-216-078-00	METAL GLAZE 16K 5%	1/10W
<TRANSISTOR>				R2554	1-216-082-00	METAL GLAZE 24K 5%	1/10W
Q2501	8-729-230-49	TRANSISTOR 2SC2712-YG		R2555	1-216-089-00	METAL GLAZE 47K 5%	1/10W
<RESISTOR>				R2556	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2501	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R2557	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2502	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R2558	1-216-088-00	METAL GLAZE 43K 5%	1/10W
R2503	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R2559	1-216-091-00	METAL GLAZE 56K 5%	1/10W
R2504	1-216-109-00	METAL GLAZE 330K 5%	1/10W	R2560	1-216-103-00	METAL GLAZE 180K 5%	1/10W
R2505	1-216-109-00	METAL GLAZE 330K 5%	1/10W	R2561	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R2506	1-216-101-00	METAL GLAZE 150K 5%	1/10W	R2562	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2507	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R2563	1-216-088-00	METAL GLAZE 43K 5%	1/10W
R2508	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R2564	1-216-088-00	METAL GLAZE 43K 5%	1/10W
R2509	1-216-130-11	METAL GLAZE 2.4M 5%	1/10W	R2565	1-216-103-00	METAL GLAZE 180K 5%	1/10W
R2510	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R2566	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2511	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R2567	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R2512	1-216-103-00	METAL GLAZE 180K 5%	1/10W	R2568	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2513	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R2569	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R2514	1-216-103-00	METAL GLAZE 180K 5%	1/10W	R2570	1-216-091-00	METAL GLAZE 56K 5%	1/10W
R2515	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R2571	1-216-078-00	METAL GLAZE 16K 5%	1/10W
R2516	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R2572	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2517	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2573	1-216-082-00	METAL GLAZE 24K 5%	1/10W
R2518	1-216-072-00	METAL GLAZE 9.1K 5%	1/10W	R2574	1-216-085-00	METAL GLAZE 33K 5%	1/10W
R2519	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2575	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R2520	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2576	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2521	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2577	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2522	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R2578	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2523	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R2579	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R2524	1-216-129-00	METAL GLAZE 2.2M 5%	1/10W	R2580	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R2526	1-216-133-00	METAL GLAZE 3.3M 5%	1/10W	R2581	1-216-081-00	METAL GLAZE 22K 5%	1/10W
				R2582	1-216-083-00	METAL GLAZE 27K 5%	1/10W
				R2583	1-216-083-00	METAL GLAZE 27K 5%	1/10W
				R2584	1-216-081-00	METAL GLAZE 22K 5%	1/10W
				R2585	1-216-073-00	METAL GLAZE 10K 5%	1/10W
				R2586	1-216-085-00	METAL GLAZE 33K 5%	1/10W
				R2587	1-216-085-00	METAL GLAZE 33K 5%	1/10W
				R2588	1-216-085-00	METAL GLAZE 33K 5%	1/10W
				R2589	1-216-081-00	METAL GLAZE 22K 5%	1/10W
				R2590	1-216-079-00	METAL GLAZE 18K 5%	1/10W
				R2591	1-216-073-00	METAL GLAZE 10K 5%	1/10W

X2 Y2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R2592	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C458	1-126-101-11	ELECT 100MF 20%	16V
R2593	1-216-079-00	METAL GLAZE 18K 5%	1/10W	C459	1-126-101-11	ELECT 100MF 20%	16V
R2594	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C460	1-126-101-11	ELECT 100MF 20%	16V
R2595	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C461	1-124-499-11	ELECT 1MF 20%	50V
R2596	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C462	1-124-499-11	ELECT 1MF 20%	50V
R2597	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C465	1-130-485-00	MYLAR 0.015MF 5%	50V
R2598	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C466	1-130-485-00	MYLAR 0.015MF 5%	50V
R2599	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C467	1-136-169-00	FILM 0.22MF 5%	50V
R2600	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C468	1-136-169-00	FILM 0.22MF 5%	50V
R2601	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C469	1-126-157-11	ELECT 10MF 20%	16V
R2602	1-216-073-00	METAL GLAZE 10K 5%	1/10W	C470	1-126-157-11	ELECT 10MF 20%	16V
R2604	1-216-089-00	METAL GLAZE 47K 5%	1/10W	C471	1-124-589-11	ELECT 47MF 20%	16V
R2605	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C472	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
R2606	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C473	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
R2610	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C474	1-124-234-00	ELECT 22MF 20%	16V
R2611	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C475	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
R2612	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C476	1-124-234-00	ELECT 22MF 20%	16V
R2613	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C477	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
R2614	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C478	1-124-478-11	ELECT 100MF 20%	25V
R2615	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C479	1-126-163-11	ELECT 4.7MF 20%	50V
R2616	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C480	1-124-768-11	ELECT 4.7MF 20%	50V
R2617	1-216-125-00	METAL GLAZE 1.5M 5%	1/10W	C481	1-124-768-11	ELECT 4.7MF 20%	50V
R2618	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	C482	1-126-163-11	ELECT 4.7MF 20%	50V
R2619	1-216-049-00	METAL GLAZE 1K 5%	1/10W	C483	1-163-113-00	CERAMIC CHIP 68PF 5%	50V
*****				C484	1-163-113-00	CERAMIC CHIP 68PF 5%	50V
*A-1394-443-A Y2 BOARD, COMPLETE				C485	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
*****				C487	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
<CAPACITOR>				C488	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C401	1-124-234-00	ELECT 22MF 20%	16V	<DIODE>			
C424	1-126-301-11	ELECT 1MF 20%	50V	D405	8-719-107-13	DIODE RD18M-B1	
C425	1-126-301-11	ELECT 1MF 20%	50V	D406	8-719-107-13	DIODE RD18M-B1	
C426	1-126-301-11	ELECT 1MF 20%	50V	D407	8-719-107-13	DIODE RD18M-B1	
C427	1-124-465-00	ELECT 0.47MF 20%	50V	D408	8-719-105-83	DIODE RD5.1M-B3	
C428	1-126-163-11	ELECT 4.7MF 20%	50V	D409	8-719-981-50	DIODE RB100A	
C429	1-124-478-11	ELECT 100MF 20%	25V	D410	8-719-981-50	DIODE RB100A	
C430	1-124-261-00	ELECT 10MF 20%	50V	D413	8-719-158-19	DIODE RD6.2SB	
C431	1-126-301-11	ELECT 1MF 20%	50V	D414	8-719-158-55	DIODE RD15SB	
C432	1-126-301-11	ELECT 1MF 20%	50V	D415	8-719-158-55	DIODE RD15SB	
C433	1-131-347-00	TANTALUM 1MF 20%	16V	<IC>			
C434	1-126-301-11	ELECT 1MF 20%	50V	IC403	8-759-996-43	IC RC4558PS	
C435	1-130-309-00	FILM 0.033MF 5%	100V	IC404	8-759-067-24	IC 24C04A1/P	
C436	1-126-301-11	ELECT 1MF 20%	50V	IC406	8-752-037-24	IC CXA1264AS	
C437	1-130-487-00	MYLAR 0.022MF 5%	50V	IC407	8-759-245-75	IC TA8184P	
C438	1-126-301-11	ELECT 1MF 20%	50V	IC408	8-752-057-18	IC CXA1315P	
C439	1-124-034-51	ELECT 33MF 20%	16V	<TRANSISTOR>			
C440	1-126-301-11	ELECT 1MF 20%	50V	Q404	8-729-216-22	TRANSISTOR 2SA1162-G	
C441	1-126-301-11	ELECT 1MF 20%	50V	Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
C442	1-124-261-00	ELECT 10MF 20%	50V	Q409	8-729-422-27	TRANSISTOR 2SD601A-Q	
C443	1-124-589-11	ELECT 47MF 20%	16V	Q410	8-729-422-27	TRANSISTOR 2SD601A-Q	
C446	1-124-234-00	ELECT 22MF 20%	16V	<RESISTOR>			
C447	1-126-301-11	ELECT 1MF 20%	50V	R447	1-216-033-00	METAL GLAZE 220 5%	1/10W
C448	1-136-170-00	FILM 0.27MF 5%	50V	R453	1-216-033-00	METAL GLAZE 220 5%	1/10W
C449	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	R464	1-216-081-00	METAL GLAZE 22K 5%	1/10W
C450	1-130-475-00	MYLAR 0.0022MF 5%	50V	R465	1-216-081-00	METAL GLAZE 22K 5%	1/10W
C451	1-124-261-00	ELECT 10MF 20%	50V	R466	1-216-025-00	METAL GLAZE 100 5%	1/10W
C452	1-124-261-00	ELECT 10MF 20%	50V	R467	1-216-033-00	METAL GLAZE 220 5%	1/10W
C453	1-130-475-00	MYLAR 0.0022MF 5%	50V				
C454	1-131-368-00	TANTALUM 3.3MF 10%	16V				
C455	1-131-347-00	TANTALUM 1MF 20%	16V				
C456	1-136-171-00	FILM 0.33MF 5%	50V				
C457	1-136-175-00	FILM 0.68MF 5%	50V				

Y2 G

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Replace only with part number
specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
R468	1-216-033-00	METAL GLAZE	220 5% 1/10W
R469	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R470	1-216-033-00	METAL GLAZE	220 5% 1/10W
R471	1-216-033-00	METAL GLAZE	220 5% 1/10W
R472	1-216-686-11	METAL CHIP	30K 0.50% 1/10W
R473	1-216-295-00	METAL GLAZE	0 5% 1/10W
R474	1-216-295-00	METAL GLAZE	0 5% 1/10W
R475	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W
R476	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W
R477	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R478	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R479	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W
R480	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R481	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R482	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R483	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R485	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R486	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R488	1-216-295-00	METAL GLAZE	0 5% 1/10W
R494	1-216-025-00	METAL GLAZE	100 5% 1/10W
R495	1-216-025-00	METAL GLAZE	100 5% 1/10W
R496	1-216-025-00	METAL GLAZE	100 5% 1/10W
R497	1-216-033-00	METAL GLAZE	220 5% 1/10W
R498	1-216-025-00	METAL GLAZE	100 5% 1/10W
R499	1-216-025-00	METAL GLAZE	100 5% 1/10W
R500	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R501	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W
R502	1-216-033-00	METAL GLAZE	220 5% 1/10W
R503	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W
R504	1-216-675-11	METAL CHIP	10K 0.50% 1/10W
R507	1-216-295-00	METAL GLAZE	0 5% 1/10W
R509	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R510	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R512	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R513	1-216-667-11	METAL CHIP	4.7K 0.50% 1/10W
R515	1-216-295-00	METAL GLAZE	0 5% 1/10W
R517	1-216-025-00	METAL GLAZE	100 5% 1/10W
R518	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R519	1-216-295-00	METAL GLAZE	0 5% 1/10W
R521	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R522	1-216-033-00	METAL GLAZE	220 5% 1/10W
R523	1-216-033-00	METAL GLAZE	220 5% 1/10W
R524	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R525	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R526	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R527	1-218-754-11	METAL CHIP	120K 0.50% 1/10W
R528	1-216-691-11	METAL CHIP	47K 0.50% 1/10W
R529	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R531	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R532	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R533	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R535	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R536	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R537	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R538	1-218-754-11	METAL CHIP	120K 0.50% 1/10W
R539	1-216-691-11	METAL CHIP	47K 0.50% 1/10W
R542	1-216-025-00	METAL GLAZE	100 5% 1/10W
R543	1-216-025-00	METAL GLAZE	100 5% 1/10W
R546	1-216-682-11	METAL CHIP	20K 0.50% 1/10W
R547	1-216-681-11	METAL CHIP	18K 0.50% 1/10W

<CONNECTOR>

Y2-401 1-573-966-11 PIN, CONNECTOR (PC BOARD) 36P

REF.NO.	PART NO.	DESCRIPTION	REMARK

	*A-1316-161-A	G BOARD, COMPLETE	*****
	4-382-854-11	SCREW (M3X10), P, SW (+)	
<CAPACITOR>			
C601	Δ 1-136-311-51	FILM	0.47MF 20% 125V
C602	Δ 1-162-599-81	CERAMIC	0.0047MF 20% 400V
C603	Δ 1-162-599-81	CERAMIC	0.0047MF 20% 400V
C604	Δ 1-104-346-11	ELECT	1000MF 200V
C605	1-162-599-12	CERAMIC	0.0047MF 20% 400V
C606	1-130-851-00	FILM	0.082MF 5% 100V
C607	1-130-851-00	FILM	0.082MF 5% 100V
C608	1-130-851-00	FILM	0.082MF 5% 100V
C609	1-130-851-00	FILM	0.082MF 5% 100V
C610	1-137-588-11	FILM	0.0047MF 5% 800V
C611	1-137-592-11	FILM	0.01MF 5% 800V
C612	1-164-625-11	CERAMIC	680PF 10% 500V
C613	1-164-625-11	CERAMIC	680PF 10% 500V
C614	1-164-625-11	CERAMIC	680PF 10% 500V
C615	1-164-625-11	CERAMIC	680PF 10% 500V
C616	1-124-443-00	ELECT	100MF 20% 10V
C618	1-164-735-11	CAP, CERAMIC	1500PF
C619	1-164-735-11	CAP, CERAMIC	1500PF
C620	Δ 1-161-741-51	CERAMIC	0.001MF 10% 400V
C621	Δ 1-161-741-51	CERAMIC	0.001MF 10% 400V
C622	1-162-599-12	CERAMIC	0.0047MF 20% 400V
C623	1-137-493-11	FILM	0.0047MF 5% 630V
C624	1-126-301-11	ELECT	1MF 20% 50V
C625	1-126-162-11	ELECT	3.3MF 20% 50V
C626	1-130-480-00	MYLAR	0.0056MF 5% 50V
C651	1-104-702-11	ELECT	470MF 20% 180V
C652	1-124-556-11	ELECT	2200MF 20% 16V
C653	1-124-913-11	ELECT	470MF 20% 50V
C654	1-124-607-11	ELECT	2200MF 20% 50V
C655	1-162-117-00	CERAMIC	100PF 10% 500V
C656	1-124-119-00	ELECT	330MF 20% 16V
C657	1-106-351-00	MYLAR	0.0022MF 20% 200V
C658	1-126-157-11	ELECT	10MF 20% 16V
C659	1-130-485-00	MYLAR	0.015MF 5% 50V
C661	1-124-484-11	ELECT	220MF 20% 35V
C662	1-124-484-11	ELECT	220MF 20% 35V
C663	1-126-104-11	ELECT	470MF 20% 35V
C666	1-126-101-11	ELECT	100MF 20% 16V
C667	1-124-443-00	ELECT	100MF 20% 10V
C668	1-124-638-11	ELECT	22MF 20% 6.3V
C669	1-162-318-11	CERAMIC	0.001MF 10% 500V
C670	1-162-318-11	CERAMIC	0.001MF 10% 500V
C672	1-124-484-11	ELECT	220MF 20% 35V
C677	Δ 1-136-311-51	FILM	0.47MF 20% 125V
C678	1-124-360-00	ELECT	1000MF 20% 16V
<DIODE>			
D601	Δ 8-719-022-99	DIODE D6SB60L	
D602	8-719-510-48	DIODE D1N20R	
D603	8-719-510-48	DIODE D1N20R	
D604	8-719-510-48	DIODE D1N20R	
D605	8-719-510-48	DIODE D1N20R	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D606	8-719-911-19	DIODE 1SS119		<IC>			
D607	8-719-510-48	DIODE D1N20R		IC651A	1-809-524-12	POWER MODULE DM-44A	
D608	8-719-510-48	DIODE D1N20R		IC654	8-719-156-73	PHOTO COUPLER PS2501-1LB	
D609	8-719-510-48	DIODE D1N20R		<COIL>			
D610	8-719-510-48	DIODE D1N20R		L651	1-412-526-11	INDUCTOR 12UH	
D611	8-719-510-48	DIODE D1N20R		L652	1-410-673-31	INDUCTOR 68UH	
D612	8-719-510-48	DIODE D1N20R		L653	1-412-532-11	INDUCTOR 39UH	
D613	8-719-109-93	DIODE RD6.2ES-B2		L654	1-412-532-11	INDUCTOR 39UH	
D651	8-719-027-43	DIODE S2L20UF		L655	1-412-532-11	INDUCTOR 39UH	
D652	8-719-027-43	DIODE S2L20UF		L656	1-412-526-11	INDUCTOR 12UH	
D653	8-719-027-43	DIODE S2L20UF		<TRANSISTOR>			
D654	8-719-027-43	DIODE S2L20UF		Q601	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
D655	8-719-510-13	DIODE D10SC4MR		Q602	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
D656	8-719-022-97	DIODE D2S4MF		Q603	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
D657	8-719-510-02	DIODE D1NS4		Q604	8-729-927-22	TRANSISTOR 2SC4664MNP-F	
D658	8-719-027-22	DIODE D3S6M-F		Q605	8-729-209-15	TRANSISTOR 2SD2012	
D659	8-719-027-22	DIODE D3S6M-F		Q652	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D660	8-719-027-22	DIODE D3S6M-F		Q653	8-729-201-53	TRANSISTOR 2SA1015-GR	
D661	8-719-027-22	DIODE D3S6M-F		Q654	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D663	8-719-510-02	DIODE D1NS4		Q655	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D665	8-719-510-02	DIODE D1NS4		Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D666	8-719-109-85	DIODE RD5.1ES-B2		<RESISTOR>			
D667	8-719-911-19	DIODE 1SS119		R601	1-249-388-11	CARBON 3.9 5% 1/4W F	
D668	8-719-911-19	DIODE 1SS119		R602	1-205-707-12	WIREWOUND 2.2 5% 10W	
D669	8-719-109-54	DIODE RD2.2ES-B2		R603	1-247-889-00	CARBON 270K 5% 1/4W	
D670	8-719-911-19	DIODE 1SS119		R604	1-216-443-11	METAL OXIDE 56K 5% 1W F	
D671	8-719-110-31	DIODE RD12ES-B2		R605	1-216-443-11	METAL OXIDE 56K 5% 1W F	
D672	8-719-911-19	DIODE 1SS119		R606	1-216-443-11	METAL OXIDE 56K 5% 1W F	
<FUSE>				R607	1-216-443-11	METAL OXIDE 56K 5% 1W F	
F1	1-532-783-21	FUSE, MICRO (SECONDARY) 5A/125V		R608	1-216-352-11	METAL OXIDE 1.8 5% 1W F	
F601	1-576-222-11	FUSE 6.3A/125V		R609	1-216-351-00	METAL OXIDE 1.5 5% 1W F	
	1-533-190-11	CLIP, FUSE; F601		R610	1-216-351-00	METAL OXIDE 1.5 5% 1W F	
F602	1-576-107-22	FUSE 3.15A/250V		R611	1-216-352-11	METAL OXIDE 1.8 5% 1W F	
	1-533-223-11	CLIP, FUSE; F602		R612	1-249-377-11	CARBON 0.47 5% 1/4W F	
<FERRITE BEAD>				R613	1-215-447-00	METAL 12K 1% 1/4W	
FB651	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R614	1-215-433-00	METAL 3.3K 1% 1/4W	
FB652	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R615	1-249-441-11	CARBON 100K 5% 1/4W	
FB653	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R616	1-249-417-11	CARBON 1K 5% 1/4W	
FB654	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R617	1-249-417-11	CARBON 1K 5% 1/4W	
FB655	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R618	1-247-688-11	CARBON 10 5% 1/4W F	
FB656	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R619	1-216-343-91	METAL OXIDE 0.33 5% 1W F	
FB659	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R620	1-202-730-00	SOLID 8.2M 20% 1/2W	
FB660	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R621	1-249-423-11	CARBON 3.3K 5% 1/4W	
FB661	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R622	1-202-888-91	SOLID 2.2M 20% 1/2W	
FB662	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R623	1-212-956-00	FUSIBLE 8.2 5% 1/2W	
FB663	1-412-911-11	INDUCTOR, FERRITE BEAD 1.1UH		R651	1-249-405-11	CARBON 100 5% 1/4W F	
FB669	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R652	1-215-868-00	METAL OXIDE 680 5% 1W F	
FB670	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH		R653	1-249-405-11	CARBON 100 5% 1/4W	
<CONNECTOR>				R654	1-249-399-11	CARBON 33 5% 1/4W F	
G-3	*1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P		R655	1-249-393-11	CARBON 10 5% 1/4W F	
G-4	*1-564-510-11	PLUG, CONNECTOR 7P		R656	1-249-443-11	CARBON 0.47 5% 1/4W F	
G-5	*1-564-507-11	PLUG, CONNECTOR 4P		R657	1-216-357-00	METAL OXIDE 4.7 5% 1W F	
G-29	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		R658	1-215-408-00	METAL 300 1% 1/4W	
G-30	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		R659	1-249-443-11	CARBON 0.47 5% 1/4W F	
G-31	*1-580-843-11	PIN, CONNECTOR (POWER)		R660	1-215-446-00	METAL 11K 1% 1/4W	
TP651	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		R661	1-215-418-00	METAL 750 1% 1/4W	
				R662	1-249-421-11	CARBON 2.2K 5% 1/4W	

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Les composants identifiés par
une trame et une marque Δ
sont critiques pour la sécurité.
Ne les remplacer que par une
pièce portant le numéro spécifique.

The components identified by
shading and mark Δ are critical
for safety.
Replace only with part number
specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
R663	1-249-410-11	CARBON 270 5% 1/4W	
R664	1-215-861-00	METAL OXIDE 47 5% 1W	F
R665	1-215-403-00	METAL 180 1% 1/4W	
R666	1-215-421-00	METAL 1K 1% 1/4W	
R667	1-215-432-00	METAL 3K 1% 1/4W	
R668	1-216-482-11	METAL OXIDE 1.8K 5% 3W	F
R669	1-249-421-11	CARBON 2.2K 5% 1/4W	
R670	1-249-412-11	CARBON 390 5% 1/4W	
R671	1-216-384-11	METAL OXIDE 0.39 5% 3W	F
R672	1-249-443-11	CARBON 0.47 5% 1/4W	F
R673	1-249-415-11	CARBON 680 5% 1/4W	
R674	1-249-421-11	CARBON 2.2K 5% 1/4W	
R675	1-249-415-11	CARBON 680 5% 1/4W	
R676	1-249-377-11	CARBON 0.47 5% 1/4W	F
R677	1-249-433-11	CARBON 22K 5% 1/4W	
R678	1-249-429-11	CARBON 10K 5% 1/4W	
R679	1-216-428-00	METAL OXIDE 180 5% 1W	F
R680	1-216-428-00	METAL OXIDE 180 5% 1W	F
R681	1-249-377-11	CARBON 0.47 5% 1/4W	F
R682	1-249-443-11	CARBON 0.47 5% 1/4W	F

<RELAY>

RY601A 1-515-601-11 RELAY
RY602A 1-515-669-21 RELAY

<TRANSFORMER>

T601 A 1-424-585-11 TRANSFORMER, LINE FILTER
T602 A 1-424-585-11 TRANSFORMER, LINE FILTER
T603 1-450-300-31 TRANSFORMER, CONVERTER DRIVE
T604 A 1-450-958-12 TRANSFORMER, CONVERTER (PRT)
T605 1-424-663-11 TRANSFORMER, FERRITE (SBT)

<THERMISTOR>

THP601A 1-800-686-43 THERMISTOR (POSITIVE)

<VARISTOR>

VDR601A 1-809-786-11 VARISTOR
VDR602A 1-809-264-81 VARISTOR

*A-1331-272-A C BOARD, COMPLETE

<CONNECTOR>

C-2 *1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P
C-24 *1-564-511-51 PLUG, CONNECTOR 8P
C-42 *1-691-134-11 PIN, CONNECTOR (PC BOARD) 2P

<CAPACITOR>

C701 1-162-116-00 CERAMIC 680PF 10% 2KV
C702 1-137-490-11 FILM 0.01MF 10% 1KV
C704 1-123-946-00 ELECT 4.7MF 20% 250V
C705 1-106-375-12 MYLAR 0.022MF 200V
C706 1-106-375-12 MYLAR 0.022MF 200V
C707 1-164-083-11 CERAMIC 680PF 10% 50V
C708 1-164-083-11 CERAMIC 680PF 10% 50V
C709 1-164-083-11 CERAMIC 680PF 10% 50V
C710 1-164-082-11 CERAMIC 560PF 10% 50V
C711 1-124-120-11 ELECT 220MF 20% 16V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C712	1-164-082-11	CERAMIC 560PF 10% 50V	
C713	1-164-082-11	CERAMIC 560PF 10% 50V	
C715	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C718	1-102-129-00	CERAMIC 0.01MF 10% 50V	
C733	1-102-074-00	CERAMIC 0.001MF 10% 50V	
<DIODE>			
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D707	8-719-911-19	DIODE 1SS119	
D708	8-719-911-19	DIODE 1SS119	
D709	8-719-911-19	DIODE 1SS119	
D710	8-719-901-83	DIODE 1SS83	
D711	8-719-901-83	DIODE 1SS83	
D712	8-719-901-83	DIODE 1SS83	
D713	8-719-901-83	DIODE 1SS83	
D714	8-719-911-19	DIODE 1SS119	

<JACK>

J701 A 1-540-071-13 SOCKET, PICTURE TUBE

<COIL>

L701 1-410-671-31 INDUCTOR 47UH

<TRANSISTOR>

Q701 8-729-326-11 TRANSISTOR 2SC2611
Q702 8-729-119-78 TRANSISTOR 2SC2785-HFE
Q703 8-729-200-17 TRANSISTOR 2SA1091-0
Q704 8-729-326-11 TRANSISTOR 2SC2611
Q705 8-729-119-78 TRANSISTOR 2SC2785-HFE
Q706 8-729-200-17 TRANSISTOR 2SA1091-0
Q707 8-729-200-17 TRANSISTOR 2SA1091-0
Q708 8-729-326-11 TRANSISTOR 2SC2611
Q709 8-729-119-78 TRANSISTOR 2SC2785-HFE
Q710 8-729-255-12 TRANSISTOR 2SC2551-0
Q711 8-729-119-76 TRANSISTOR 2SA1175-HFE
Q712 8-729-255-12 TRANSISTOR 2SC2551-0
Q714 8-729-200-17 TRANSISTOR 2SA1091-0
Q715 8-729-200-17 TRANSISTOR 2SA1091-0
Q716 8-729-200-17 TRANSISTOR 2SA1091-0

<RESISTOR>

R701 1-216-398-11 METAL OXIDE 5.6 5% 3W F
R702 1-202-883-11 SOLID 680K 20% 1/2W
R703 1-202-838-00 SOLID 100K 20% 1/2W
R706 1-202-838-00 SOLID 100K 20% 1/2W
R707 1-202-842-11 SOLID 220K 20% 1/2W
R708 1-202-818-00 SOLID 1K 20% 1/2W
R709 1-202-818-00 SOLID 1K 20% 1/2W
R710 1-202-818-00 SOLID 1K 20% 1/2W
R713 1-216-486-00 METAL OXIDE 8.2K 5% 3W F
R715 1-202-549-00 SOLID 100 10% 1/2W
R716 1-216-486-00 METAL OXIDE 8.2K 5% 3W F
R720 1-216-486-00 METAL OXIDE 8.2K 5% 3W F
R723 1-249-405-11 CARBON 100 5% 1/4W

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D V

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE		<CAPACITOR>			
Q913	8-729-011-02	TRANSISTOR 2SK1917		C951	1-102-074-00	CERAMIC 0.001MF	10% 50V
<RESISTOR>				C952	1-102-125-00	CERAMIC 0.0047MF	10% 50V
R801	1-249-409-11	CARBON 220 5%	1/4W	C961	1-161-830-00	CERAMIC 0.0047MF	500V
R802	1-249-409-11	CARBON 220 5%	1/4W	C962	1-101-880-00	CERAMIC 47PF	5% 50V
R804	1-247-891-00	CARBON 330K 5%	1/4W	C963	1-123-935-00	ELECT 33MF	20% 160V
R806	1-247-885-00	CARBON 180K 5%	1/4W	C964	1-126-101-11	ELECT 100MF	20% 16V
R807	1-247-891-00	CARBON 330K 5%	1/4W	C968	1-106-383-00	MYLAR 0.047MF	200V
R808	1-215-461-00	METAL 47K 1%	1/4W	C969	1-124-799-11	ELECT 2.2MF	20% 160V
R809	1-249-423-11	CARBON 3.3K 5%	1/4W	C970	1-106-391-12	MYLAR 0.1MF	10% 200V
R810	1-249-413-11	CARBON 470 5%	1/4W	C971	1-126-157-11	ELECT 10MF	20% 16V
R811	1-249-434-11	CARBON 27K 5%	1/4W	C972	1-126-541-11	ELECT 330MF	20% 16V
R812	1-249-438-11	CARBON 56K 5%	1/4W	C973	1-106-383-00	MYLAR 0.047MF	200V
R813	1-249-417-11	CARBON 1K 5%	1/4W	C975	1-126-101-11	ELECT 100MF	20% 16V
R815	1-249-427-11	CARBON 6.8K 5%	1/4W	C976	1-126-157-11	ELECT 10MF	20% 16V
R816	1-249-425-11	CARBON 4.7K 5%	1/4W	C977	1-102-963-00	CERAMIC 33PF	5% 50V
R817	1-249-423-11	CARBON 3.3K 5%	1/4W	C978	1-130-471-00	MYLAR 0.001MF	5% 50V
R818	1-249-417-11	CARBON 1K 5%	1/4W	C979	1-130-471-00	MYLAR 0.001MF	5% 50V
R819	1-249-432-11	CARBON 18K 5%	1/4W	C980	1-124-915-11	ELECT 10MF	20% 16V
R820	1-249-417-11	CARBON 1K 5%	1/4W	<DIODE>			
R821	1-216-379-11	METAL OXIDE 6.8 5%	2W F	D961	8-719-911-19	DIODE 1SS119	
R822	1-249-423-11	CARBON 3.3K 5%	1/4W F	D963	8-719-911-19	DIODE 1SS119	
R824	1-249-417-11	CARBON 1K 5%	1/4W F	D964	8-719-911-19	DIODE 1SS119	
R825	1-215-857-11	METAL OXIDE 10 5%	1W F	D965	8-719-911-19	DIODE 1SS119	
R826	1-249-404-00	CARBON 82 5%	1/4W F	D966	8-719-911-19	DIODE 1SS119	
R827	1-215-875-11	METAL OXIDE 10K 5%	1W F	D967	8-719-110-88	DIODE RD39ES-B2	
R828	1-249-441-11	CARBON 100K 5%	1/4W	D968	8-719-110-88	DIODE RD39ES-B2	
R829	1-249-414-11	CARBON 560 5%	1/4W	<COIL>			
R830	1-249-411-11	CARBON 330 5%	1/4W	L962	1-408-416-00	INDUCTOR 39UH	
R831	1-249-426-11	CARBON 5.6K 5%	1/4W F	<TRANSISTOR>			
R832	1-215-887-00	METAL OXIDE 150 5%	2W F	Q956	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R833	1-249-421-11	CARBON 2.2K 5%	1/4W	Q961	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R834	1-249-438-11	CARBON 56K 5%	1/4W	Q962	8-729-119-76	TRANSISTOR 2SA1175-HFE	
R835	1-249-393-11	CARBON 10 5%	1/4W	Q963	8-729-208-39	TRANSISTOR 2SA1306A-Y	
R836	1-249-435-11	CARBON 33K 5%	1/4W	Q964	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R837	1-249-435-11	CARBON 33K 5%	1/4W F	Q965	8-729-017-06	TRANSISTOR 2SC4793	
R838	1-216-359-00	METAL OXIDE 6.8 5%	1W	Q966	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R839	1-249-410-11	CARBON 270 5%	1/4W	Q967	8-729-142-86	TRANSISTOR 2SC3733	
R840	1-249-429-11	CARBON 10K 5%	1/4W	<RESISTOR>			
R841	1-249-437-11	CARBON 47K 5%	1/4W	R951	1-249-434-11	CARBON 27K 5%	1/4W
R842	1-249-429-11	CARBON 10K 5%	1/4W	R952	1-249-423-11	CARBON 3.3K 5%	1/4W
R843	1-249-421-11	CARBON 2.2K 5%	1/4W	R953	1-249-423-11	CARBON 3.3K 5%	1/4W
R927	1-249-419-11	CARBON 1.5K 5%	1/4W	R954	1-247-903-00	CARBON 1M 5%	1/4W
R928	1-249-421-11	CARBON 2.2K 5%	1/4W	R955	1-249-421-11	CARBON 2.2K 5%	1/4W
R929	1-249-429-11	CARBON 10K 5%	1/4W	R962	1-249-409-11	CARBON 220 5%	1/4W
R930	1-249-434-11	CARBON 27K 5%	1/4W	R963	1-249-419-11	CARBON 1.5K 5%	1/4W
R931	1-249-421-11	CARBON 2.2K 5%	1/4W	R964	1-247-734-11	CARBON 39 5%	1/2W F
R932	1-249-423-11	CARBON 3.3K 5%	1/4W	R965	1-249-414-11	CARBON 560 5%	1/4W F
R933	1-249-421-11	CARBON 2.2K 5%	1/4W	R966	1-249-418-11	CARBON 1.2K 5%	1/4W
R934	1-249-441-11	CARBON 100K 5%	1/4W	R968	1-249-418-11	CARBON 1.2K 5%	1/4W
R935	1-249-429-11	CARBON 10K 5%	1/4W	R969	1-249-384-11	CARBON 1.8 5%	1/4W F
R936	1-249-429-11	CARBON 10K 5%	1/4W	R970	1-249-435-11	CARBON 33K 5%	1/4W
R937	1-249-421-11	CARBON 2.2K 5%	1/4W				
R938	1-249-405-11	CARBON 100 5%	1/4W				
R939	1-249-405-11	CARBON 100 5%	1/4W F				
R940	1-249-405-11	CARBON 100 5%	1/4W F				
R941	1-249-405-11	CARBON 100 5%	1/4W				
R942	1-215-892-11	METAL OXIDE 1K 5%	2W F				

*A-1342-223-A V BOARD, COMPLETE

4-382-854-11 SCREW (M3X10), P, SW (+)

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

KV-32XBR26/32XBR36
RM-Y112A TDR-IF310/RM-Y113A

V HS1 HS2 U

REF.NO.	PART NO.	DESCRIPTION	REMARK
R972	1-249-432-11	CARBON	18K 5% 1/4W
R974	1-216-476-11	METAL OXIDE	180 5% 3W F
R975	1-249-417-11	CARBON	1K 5% 1/4W F
R976	1-249-432-11	CARBON	18K 5% 1/4W
R977	1-249-438-11	CARBON	56K 5% 1/4W
R978	1-249-430-11	CARBON	12K 5% 1/4W
R979	1-249-414-11	CARBON	560 5% 1/4W
R980	1-249-420-11	CARBON	1.8K 5% 1/4W
R981	1-249-412-11	CARBON	390 5% 1/4W
R982	1-249-384-11	CARBON	1.8 5% 1/4W F
R983	1-249-441-11	CARBON	100K 5% 1/4W
R984	1-249-405-11	CARBON	100 5% 1/4W
R985	1-249-400-11	CARBON	39 5% 1/4W F
R986	1-249-435-11	CARBON	33K 5% 1/4W
R987	1-249-428-11	CARBON	8.2K 5% 1/4W
R988	1-249-418-11	CARBON	1.2K 5% 1/4W
R989	1-249-413-11	CARBON	470 5% 1/4W
R990	1-216-451-11	METAL OXIDE	120 5% 2W F
R991	1-249-409-11	CARBON	220 5% 1/4W

<CONNECTOR>

V-20 *1-564-512-11 PLUG, CONNECTOR 9P

*1-643-150-11 HS1 BOARD

<CAPACITOR>

C1603	1-124-589-11	ELECT	47MF	20%	16V
C1604	1-124-589-11	ELECT	47MF	20%	16V

<DIODE>

D1601	1-809-718-11	LED UNIT
D1602	1-809-718-11	LED UNIT

<CONNECTOR>

HS1-37*1-564-514-11 PLUG, CONNECTOR 11P

<IC>

IC1601 8-746-185-11 IC SBX1618-51

<RESISTOR>

R1601	1-249-405-11	CARBON	100 5% 1/4W
R1602	1-249-407-11	CARBON	150 5% 1/4W
R1604	1-249-419-11	CARBON	1.5K 5% 1/4W
R1605	1-249-421-11	CARBON	2.2K 5% 1/4W
R1606	1-249-425-11	CARBON	4.7K 5% 1/4W
R1607	1-249-430-11	CARBON	12K 5% 1/4W

<SWITCH>

S1601	1-571-532-21	SWITCH, TACTIL
S1602	1-571-532-21	SWITCH, TACTIL
S1603	1-571-532-21	SWITCH, TACTIL
S1604	1-571-532-21	SWITCH, TACTIL
S1605	1-571-532-21	SWITCH, TACTIL
S1606	1-571-532-21	SWITCH, TACTIL

REF.NO.	PART NO.	DESCRIPTION	REMARK
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S1607A 1-571-532-23 SWITCH, TACTIL (POWER)

*1-643-151-11 HS2 BOARD

<DIODE>

D1650	8-719-108-12	DIODE RD9.1EW
D1651	8-719-108-12	DIODE RD9.1EW
D1652	8-719-108-12	DIODE RD9.1EW

<CONNECTOR>

HS2-16*1-564-513-11	PLUG, CONNECTOR 10P
HS2-49*1-564-506-11	PLUG, CONNECTOR 3P

<JACK>

J1650 1-569-804-11 JACK BLOCK, PIN (L TYPE) 3P (V3 IN)

*A-1373-411-A U BOARD, COMPLETE (KV-32XBR26(US/CND))

*A-1373-412-A U BOARD, COMPLETE (KV-32XBR36(US/CND))

<CAPACITOR>

C1004	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1005	1-126-301-11	ELECT	1MF	20%	50V
C1006	1-164-096-11	CERAMIC	0.01MF	20%	50V
C1007	1-124-598-11	ELECT	22MF	20%	25V
C1008	1-124-598-11	ELECT	22MF	20%	25V
C1010	1-124-465-00	ELECT	0.47MF	20%	50V
C1011	1-124-465-00	ELECT	0.47MF	20%	50V
C1012	1-124-465-00	ELECT	0.47MF	20%	50V
C1013	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1014	1-126-163-11	ELECT	4.7MF	20%	50V
C1016	1-126-163-11	ELECT	4.7MF	20%	50V
C1018	1-126-301-11	ELECT	1MF	20%	50V
C1020	1-124-242-00	ELECT	33MF	20%	25V
C1021	1-124-465-00	ELECT	0.47MF	20%	50V
C1022	1-124-242-00	ELECT	33MF	20%	25V
C1023	1-126-163-11	ELECT	4.7MF	20%	50V
C1024	1-126-163-11	ELECT	4.7MF	20%	50V
C1026	1-164-048-11	CERAMIC	12PF	5%	50V
C1027	1-164-048-11	CERAMIC	12PF	5%	50V
C1028	1-124-242-00	ELECT	33MF	20%	25V
C1029	1-124-282-00	ELECT	22MF	20%	16V
C1030	1-124-478-11	ELECT	100MF	20%	25V
C1031	1-102-963-00	CERAMIC	33PF	5%	50V
C1033	1-124-598-11	ELECT	22MF	20%	25V
C1034	1-124-282-00	ELECT	22MF	20%	16V
C1036	1-124-282-00	ELECT	22MF	20%	16V
C1037	1-124-282-00	ELECT	22MF	20%	16V
C1039	1-124-478-11	ELECT	100MF	20%	25V
C1046	1-124-242-00	ELECT	33MF	20%	25V
C1047	1-124-465-00	ELECT	0.47MF	20%	50V
C1048	1-126-301-11	ELECT	1MF	20%	50V
C1049	1-124-598-11	ELECT	22MF	20%	25V

(KV-32XBR36(US/CND))
20% 50V
(KV-32XBR36(US/CND))
5% 50V

(KV-32XBR36(US/CND))
20% 25V

U

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1050	1-124-242-00	ELECT	33MF 20% 25V (KV-32XBR36(US/CND))	Q1016	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1051	1-124-465-00	ELECT	0.47MF 20% 50V	Q1017	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1054	1-126-163-11	ELECT	4.7MF 20% 50V (KV-32XBR36(US/CND))	Q1018	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1055	1-124-589-11	ELECT	47MF 20% 16V	Q1019	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1056	1-124-499-11	ELECT	1MF 20% 50V	Q1020	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1057	1-124-768-11	ELECT	4.7MF 20% 50V	Q1021	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1058	1-126-163-11	ELECT	4.7MF 20% 50V (KV-32XBR36(US/CND))	Q1022	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1059	1-124-499-11	ELECT	1MF 20% 50V	Q1023	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1060	1-124-499-11	ELECT	1MF 20% 50V	Q1025	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1061	1-124-499-11	ELECT	1MF 20% 50V	Q1029	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1062	1-102-129-00	CERAMIC	0.01MF 10% 50V	Q1030	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1063	1-124-768-11	ELECT	4.7MF 20% 50V	Q1031	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C1066	1-126-101-11	ELECT	100MF 20% 16V	Q1032	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1070	1-126-103-11	ELECT	470MF 20% 16V	Q1033	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1110	1-124-768-11	ELECT	4.7MF 20% 50V (KV-32XBR36(US/CND))	Q1034	8-729-119-76	TRANSISTOR 2SA1175-HFE	
C1111	1-124-768-11	ELECT	4.7MF 20% 50V (KV-32XBR36(US/CND))	<RESISTOR>			
<FILTER BLOCK>				R1011	1-249-435-11	CARBON 33K 5% 1/4W	
CM1002	1-466-162-31	BLOCK, COM FILTER (CFB-4)		R1012	1-249-434-11	CARBON 27K 5% 1/4W	
<DIODE>				R1013	1-249-417-11	CARBON 1K 5% 1/4W	
D1005	8-719-110-36	DIODE RD13ES-B2		R1014	1-249-441-11	CARBON 100K 5% 1/4W	
D1009	8-719-110-36	DIODE RD13ES-B2		R1015	1-215-437-00	METAL 4.7K 1% 1/4W	
D1010	8-719-110-36	DIODE RD13ES-B2		R1016	1-249-441-11	CARBON 100K 5% 1/4W	
D1011	8-719-110-36	DIODE RD13ES-B2		R1017	1-249-405-11	CARBON 100 5% 1/4W	
D1012	8-719-110-36	DIODE RD13ES-B2		R1018	1-249-427-11	CARBON 6.8K 5% 1/4W	
D1013	8-719-110-36	DIODE RD13ES-B2		R1019	1-249-427-11	CARBON 6.8K 5% 1/4W	
D1014	8-719-110-36	DIODE RD13ES-B2		R1023	1-249-405-11	CARBON 100 5% 1/4W	
D1017	8-719-110-36	DIODE RD13ES-B2		R1026	1-215-437-00	METAL 4.7K 1% 1/4W	
D1018	8-719-110-36	DIODE RD13ES-B2		R1028	1-249-434-11	CARBON 27K 5% 1/4W	
D1019	8-719-110-36	DIODE RD13ES-B2		R1029	1-249-435-11	CARBON 33K 5% 1/4W	
D1020	8-719-109-66	DIODE RD3.3ES-B2		R1030	1-249-417-11	CARBON 1K 5% 1/4W	
D1021	8-719-109-66	DIODE RD3.3ES-B2		R1032	1-249-417-11	CARBON 1K 5% 1/4W	
D1022	8-719-109-66	DIODE RD3.3ES-B2		R1033	1-249-393-11	CARBON 10 5% 1/4W F	
D1023	8-719-109-66	DIODE RD3.3ES-B2 (KV-32XBR36(US/CND))		R1034	1-249-417-11	CARBON 1K 5% 1/4W	
D1025	8-719-911-19	DIODE 1SS119		R1035	1-249-427-11	CARBON 6.8K 5% 1/4W (KV-32XBR36(US/CND))	
D1026	8-719-911-19	DIODE 1SS119		R1036	1-249-440-11	CARBON 82K 5% 1/4W	
D1027	8-719-911-19	DIODE 1SS119		R1037	1-249-440-11	CARBON 82K 5% 1/4W	
<IC>				R1038	1-249-440-11	CARBON 82K 5% 1/4W	
IC1002	8-752-056-50	IC CXA1545S		R1040	1-249-427-11	CARBON 6.8K 5% 1/4W (KV-32XBR36(US/CND))	
IC1010	8-759-145-57	IC UPC4557C (KV-32XBR36(US/CND))		R1041	1-249-441-11	CARBON 100K 5% 1/4W (KV-32XBR36(US/CND))	
IC1011	8-759-145-57	IC UPC4557C		R1042	1-249-441-11	CARBON 100K 5% 1/4W (KV-32XBR36(US/CND))	
<COIL>				R1043	1-249-417-11	CARBON 1K 5% 1/4W	
L1001	1-408-422-00	INDUCTOR 120UH		R1046	1-249-413-11	CARBON 470 5% 1/4W	
L1002	1-408-422-00	INDUCTOR 120UH		R1048	1-249-405-11	CARBON 100 5% 1/4W	
<TRANSISTOR>				R1050	1-249-405-11	CARBON 100 5% 1/4W	
Q1009	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1051	1-249-417-11	CARBON 1K 5% 1/4W	
Q1010	8-729-119-78	TRANSISTOR 2SC2785-HFE		R1052	1-249-413-11	CARBON 470 5% 1/4W	
Q1012	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-32XBR36(US/CND))		R1054	1-249-405-11	CARBON 100 5% 1/4W	
Q1013	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-32XBR36(US/CND))		R1055	1-249-413-11	CARBON 470 5% 1/4W	
				R1056	1-249-405-11	CARBON 100 5% 1/4W	
				R1057	1-249-441-11	CARBON 100K 5% 1/4W	
				R1059	1-249-405-11	CARBON 100 5% 1/4W	
				R1061	1-249-409-11	CARBON 220 5% 1/4W	
				R1062	1-249-441-11	CARBON 100K 5% 1/4W	
				R1063	1-249-409-11	CARBON 220 5% 1/4W	
				R1066	1-215-437-00	METAL 4.7K 1% 1/4W	
				R1067	1-215-437-00	METAL 4.7K 1% 1/4W	
				R1068	1-215-437-00	METAL 4.7K 1% 1/4W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1069	1-215-437-00	METAL	4.7K 1% 1/4W	U-16	*1-564-513-11	PLUG, CONNECTOR 10P	
R1070	1-249-411-11	CARBON	330 5% 1/4W	U-19	*1-564-509-11	PLUG, CONNECTOR 6P	
R1071	1-249-431-11	CARBON	15K 5% 1/4W	U-22	1-566-942-11	CONNECTOR, HINGE(RECEPTACLE) 30P	
R1073	1-249-431-11	CARBON	15K 5% 1/4W	U-23	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)	
R1077	1-249-418-11	CARBON	1.2K 5% 1/4W	U-47	*1-564-506-11	PLUG, CONNECTOR 3P	
R1078	1-249-418-11	CARBON	1.2K 5% 1/4W	U-48	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
R1079	1-249-405-11	CARBON	100 5% 1/4W	U-50	*1-564-505-11	PLUG, CONNECTOR 2P	
R1080	1-215-423-00	METAL	1.2K 1% 1/4W	*****			
R1081	1-215-421-00	METAL	1K 1% 1/4W	*A-1373-414-A UT BOARD, COMPLETE			
R1089	1-249-405-11	CARBON	100 5% 1/4W	*****			
R1092	1-247-688-11	CARBON	10 5% 1/4W F (KV-32XBR36(US/CND))	<CAPACITOR>			
R1094	1-249-405-11	CARBON	100 5% 1/4W	C1152	1-102-074-00	CERAMIC	0.001MF 10% 50V
R1096	1-249-405-11	CARBON	100 5% 1/4W	C1154	1-164-096-11	CERAMIC	0.01MF 50V
R1099	1-249-413-11	CARBON	470 5% 1/4W	C1155	1-126-103-11	ELECT	470MF 20% 16V
R1100	1-249-429-11	CARBON	10K 5% 1/4W	C1158	1-124-598-11	ELECT	22MF 20% 25V
R1101	1-249-405-11	CARBON	100 5% 1/4W	C1160	1-124-598-11	ELECT	22MF 20% 25V
R1102	1-249-393-11	CARBON	10 5% 1/4W (KV-32XBR36(US/CND))	C1161	1-124-598-11	ELECT	22MF 20% 25V
R1103	1-249-441-11	CARBON	100K 5% 1/4W (KV-32XBR36(US/CND))	C1164	1-126-103-11	ELECT	470MF 20% 16V
R1106	1-249-435-11	CARBON	33K 5% 1/4W (KV-32XBR36(US/CND))	C1165	1-126-301-11	ELECT	1MF 20% 50V
R1108	1-249-434-11	CARBON	27K 5% 1/4W (KV-32XBR36(US/CND))	C1166	1-126-301-11	ELECT	1MF 20% 50V
R1109	1-249-435-11	CARBON	33K 5% 1/4W (KV-32XBR36(US/CND))	C1167	1-126-301-11	ELECT	1MF 20% 50V
R1110	1-249-405-11	CARBON	100 5% 1/4W	C1168	1-126-301-11	ELECT	1MF 20% 50V
R1112	1-249-409-11	CARBON	220 5% 1/4W (KV-32XBR36(US/CND))	<DIODE>			
R1114	1-249-434-11	CARBON	27K 5% 1/4W (KV-32XBR36(US/CND))	D1152	8-719-110-36	DIODE RD13ES-B2	
R1115	1-249-409-11	CARBON	220 5% 1/4W (KV-32XBR36(US/CND))	D1158	8-719-110-36	DIODE RD13ES-B2	
R1116	1-249-441-11	CARBON	100K 5% 1/4W	D1159	8-719-110-36	DIODE RD13ES-B2	
R1117	1-249-393-11	CARBON	10 5% 1/4W (KV-32XBR36(US/CND))	D1160	8-719-110-36	DIODE RD13ES-B2	
R1118	1-249-413-11	CARBON	470 5% 1/4W	D1163	8-719-110-36	DIODE RD13ES-B2	
R1119	1-249-441-11	CARBON	100K 5% 1/4W (KV-32XBR36(US/CND))	D1164	8-719-110-36	DIODE RD13ES-B2	
R1120	1-249-413-11	CARBON	470 5% 1/4W (KV-32XBR36(US/CND))	D1165	8-719-110-36	DIODE RD13ES-B2	
R1121	1-249-441-11	CARBON	100K 5% 1/4W	D1166	8-719-110-36	DIODE RD13ES-B2	
R1122	1-249-413-11	CARBON	470 5% 1/4W (KV-32XBR36(US/CND))	D1167	8-719-110-36	DIODE RD13ES-B2	
R1133	1-249-405-11	CARBON	100 5% 1/4W	D1168	8-719-110-36	DIODE RD13ES-B2	
R1134	1-249-405-11	CARBON	100 5% 1/4W	D1169	8-719-110-36	DIODE RD13ES-B2	
R1137	1-249-411-11	CARBON	330 5% 1/4W	D1170	8-719-110-36	DIODE RD13ES-B2	
R1138	1-249-415-11	CARBON	680 5% 1/4W	<JACK>			
R1139	1-249-413-11	CARBON	470 5% 1/4W	J1003	1-573-970-11	BLOCK, (S) TERMINAL (V1 IN)	
R1140	1-249-413-11	CARBON	470 5% 1/4W	J1004	1-695-049-11	BLOCK, (S) TERMINAL (V2/V3 IN)	
R1141	1-249-413-11	CARBON	470 5% 1/4W	J1005	1-695-054-11	JACK BLOCK, PIN (LOOP OUT)	
R1142	1-249-415-11	CARBON	680 5% 1/4W	J1006	1-573-970-11	BLOCK, (S) TERMINAL (MONITOR OUT)	
R1147	1-249-405-11	CARBON	100 5% 1/4W	J1007	1-573-969-11	JACK BLOCK, PIN (AUDIO OUT(FIXED))	
R1148	1-249-405-11	CARBON	100 5% 1/4W	J1008	1-573-969-11	JACK BLOCK, PIN (AUDIO OUT(VAR))	
R1149	1-249-417-11	CARBON	1K 5% 1/4W	<RESISTOR>			
R1150	1-249-405-11	CARBON	100 5% 1/4W	R1153	1-249-403-11	CARBON	68 5% 1/4W
R1151	1-249-405-11	CARBON	100 5% 1/4W	R1155	1-249-417-11	CARBON	1K 5% 1/4W
R1152	1-249-417-11	CARBON	1K 5% 1/4W	R1164	1-247-895-00	CARBON	470K 5% 1/4W
<CONNECTOR>				R1165	1-247-895-00	CARBON	470K 5% 1/4W
U-12	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P		R1166	1-247-895-00	CARBON	470K 5% 1/4W
U-13	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P		R1167	1-247-895-00	CARBON	470K 5% 1/4W
				R1168	1-247-895-00	CARBON	470K 5% 1/4W
				R1169	1-249-403-11	CARBON	68 5% 1/4W
				R1170	1-249-403-11	CARBON	68 5% 1/4W
				R1171	1-247-895-00	CARBON	470K 5% 1/4W
				R1172	1-247-895-00	CARBON	470K 5% 1/4W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1173	1-247-804-11	CARBON	75 5% 1/4W				
R1174	1-247-895-00	CARBON	470K 5% 1/4W				
R1175	1-247-895-00	CARBON	470K 5% 1/4W				
R1176	1-247-804-11	CARBON	75 5% 1/4W				
R1178	1-247-895-00	CARBON	470K 5% 1/4W				
R1179	1-247-895-00	CARBON	470K 5% 1/4W				
R1180	1-247-804-11	CARBON	75 5% 1/4W				
R1181	1-247-804-11	CARBON	75 5% 1/4W				
R1183	1-247-895-00	CARBON	470K 5% 1/4W				
R1184	1-247-895-00	CARBON	470K 5% 1/4W				
R1185	1-247-895-00	CARBON	470K 5% 1/4W				
R1186	1-247-895-00	CARBON	470K 5% 1/4W				
R1188	1-247-804-11	CARBON	75 5% 1/4W				
R1191	1-215-437-00	METAL	4.7K 1% 1/4W				
R1192	1-215-437-00	METAL	4.7K 1% 1/4W				
R1193	1-215-437-00	METAL	4.7K 1% 1/4W				
R1194	1-215-437-00	METAL	4.7K 1% 1/4W				
R1196	1-249-426-11	CARBON	5.6K 5% 1/4W				
<SWITCH>							
S1150	1-572-198-11	SWITCH, KEYBOARD					
<CONNECTOR>							
UT-9	*1-564-517-11	PLUG, CONNECTOR 2P					
UT-11	*1-564-519-11	PLUG, CONNECTOR 4P					
UT-22	*1-566-941-11	CONNECTOR, HINGE (TAB) 30P					
UT-23	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P					
UT-35	*1-564-518-11	PLUG, CONNECTOR 3P					
UT-38	*1-564-517-11	PLUG, CONNECTOR 2P					

*A-1394-421-A S BOARD, COMPLETE							

<CAPACITOR>							
C3403	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V				
C3408	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C3409	1-124-477-11	ELECT 47MF	20% 16V				
C3411	1-124-034-51	ELECT 33MF	20% 16V				
C3442	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V				
C3446	1-163-129-00	CERAMIC CHIP 330PF	5% 50V				
C3447	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C3448	1-163-023-00	CERAMIC CHIP 0.015MF	10% 50V				
C3449	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V				
C3450	1-163-109-00	CERAMIC CHIP 47PF	5% 50V				
C3451	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C3452	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V				
C3453	1-124-477-11	ELECT 47MF	20% 16V				
C3454	1-126-162-11	ELECT 3.3MF	20% 50V				
C3455	1-126-163-11	ELECT 4.7MF	20% 16V				
C3456	1-163-129-00	CERAMIC CHIP 330PF	5% 50V				
C3457	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C3459	1-124-477-11	ELECT 47MF	20% 16V				
C3460	1-163-099-00	CERAMIC CHIP 18PF	5% 50V				
C3461	1-163-099-00	CERAMIC CHIP 18PF	5% 50V				
C3507	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C3508	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
C3509	1-163-139-00	CERAMIC CHIP 820PF	5% 50V				
C3515	1-163-121-00	CERAMIC CHIP 150PF	5% 50V				
C3540	1-126-157-11	ELECT 10MF	20% 16V				
<DIODE>							
D3444	8-719-404-46	DIODE MA110					
<IC>							
IC3401	8-759-403-44	IC MN1280-S					
IC3402	8-759-070-42	IC M37201M6-A18FP					
IC3441	8-759-081-30	IC MC78L05ACPRP					
IC3442	8-759-084-12	IC LA7945					
IC3443	8-759-158-03	IC LC7458A-02					
IC3444	8-759-403-44	IC MN1280-S					
<COIL>							
L3401	1-408-421-00	INDUCTOR	100UH				
L3461	1-408-409-00	INDUCTOR	10UH				
L3462	1-408-421-00	INDUCTOR	100UH				
<TRANSISTOR>							
Q3441	8-729-422-27	TRANSISTOR 2SD601A-Q					
Q3444	8-729-903-10	TRANSISTOR FMW1					
<RESISTOR>							
R3401	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3402	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3403	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3404	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R3405	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R3406	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R3407	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R3408	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R3409	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R3441	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R3442	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R3443	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R3444	1-216-077-00	METAL GLAZE	15K 5% 1/10W				
R3445	1-216-689-11	METAL GLAZE	39K 5% 1/10W				
R3446	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R3449	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3450	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R3451	1-216-093-00	METAL GLAZE	68K 5% 1/10W				
R3452	1-216-079-00	METAL GLAZE	18K 5% 1/10W				
R3453	1-216-679-11	METAL CHIP	15K 0.50% 1/10W				
R3454	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3455	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R3456	1-216-077-00	METAL GLAZE	15K 5% 1/10W				
R3463	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3464	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3465	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R3472	1-216-091-00	METAL GLAZE	56K 5% 1/10W				
R3473	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R3474	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R3504	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R3509	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3511	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R3512	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R3513	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R3514	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R3519	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R3520	1-216-049-00	METAL GLAZE	1K 5% 1/10W				

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R3521	1-216-049-00	METAL GLAZE 1K 5% 1/10W		REMOTE COMMANDER			
R3525	1-216-295-00	METAL GLAZE 0 5% 1/10W		1-693-113-21	REMOTE COMMANDER (RM-Y113A)		
R3526	1-216-073-00	METAL GLAZE 10K 5% 1/10W			(KV-32XBR36(US/CND))		
R3528	1-216-295-00	METAL GLAZE 0 5% 1/10W		1-693-114-21	REMOTE COMMANDER (RM-Y112A)		
R3529	1-216-295-00	METAL GLAZE 0 5% 1/10W			(KV-32XBR26(US/CND))		
R3530	1-216-073-00	METAL GLAZE 10K 5% 1/10W		9-902-719-01	COVER (FOR RM-Y112A, Y113A)		
R3531	1-216-073-00	METAL GLAZE 10K 5% 1/10W		9-998-214-01	COVER BATTERY (FOR RM-Y112A, Y113A)		
R3532	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
R3535	1-216-033-00	METAL GLAZE 220 5% 1/10W					
R3537	1-216-295-00	METAL GLAZE 0 5% 1/10W					
R3540	1-216-073-00	METAL GLAZE 10K 5% 1/10W					
<CONNECTOR>							
S-42	*1-568-378-21	PIN, CONNECTOR 3P					
S-42	*1-565-514-11	SOCKET, CONNECTOR 2P					
S-43	*1-564-508-11	PLUG, CONNECTOR 5P					
S-45	*1-564-511-71	PLUG, CONNECTOR 8P					
S-46	*1-564-506-11	PLUG, CONNECTOR 3P					
S-47	*1-564-506-11	PLUG, CONNECTOR 3P					
<CRYSTAL>							
X3401	1-577-358-21	VIBRATOR, CERAMIC 4MHZ					
X3441	1-577-364-11	VIBRATOR, CERAMIC 12MHZ					

MISCELLANEOUS							

Δ 1-402-952-11	COIL, DEMAGNETIZATION						
Δ 1-417-178-11	SELECTOR, ANTENNA (AS-2)						
	(KV-32XBR36(US/CND))						
Δ 1-451-315-11	DEFLECTION YOKE (Y34FXA)						
1-452-032-00	MAGNET, DISK; 10MM ϕ						
1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ						
Δ 1-452-579-11	NECK ASSY, PICTURE TUBE (NA322)						
1-544-544-21	SPEAKER (10CM)						
1-544-580-11	SPEAKER (2.5CM)						
*1-555-400-00	CABLE, PIN						
*1-557-056-31	CABLE, P-P (KV-32XBR36(US/CND))						
1-561-306-00	JACK, PIN (F) (KV-32XBR26(US/CND))						
Δ 1-696-002-12	CORD, POWER(WITH NOISE FILTER)						
A-4546-027-A	TRANSMITTER TMR-D1002						
	(KV-32XBR36(US/CND))						
A-4546-028-A	LUMINOUS UNIT IFP-D1002						
	(KV-32XBR36(US/CND))						
V901 Δ 8-733-723-05	PICTURE TUBE (A80JY50X)						

ACCESSORIES AND PACKING MATERIALS							

3-757-071-21	MANUAL, INSTRUCTION (ENGLISH)						
3-757-071-31	MANUAL, INSTRUCTION (FRENCH)						
	(KV-32XBR26(CND)/32XBR36(CND))						
3-757-071-41	MANUAL, INSTRUCTION (SPANISH)						
	(KV-32XBR26(US)/32XBR36(US))						
*4-035-985-01	CUSHION (UPPER) (ASSY)						
*4-035-986-01	CUSHION (LOWER) (ASSY)						
*4-035-991-01	INDIVIDUAL CARTON						
*4-384-027-01	BAG, PROTECTION						
A-4503-953-A	HEADPHONE TDR-IF310 (KV-32XBR36(US/CND))						

MEMO

Handwriting practice area consisting of 25 horizontal dotted lines.

ACCESSORY

TDR-IF310

SPECIFICATIONS

General

Modulation system	Frequency modulation
Carrier frequency	Right 2.8 MHz Left 2.3 MHz
Effective range	Up to approx. 7 m (23 ft.)
Frequency response	18 – 22,000 Hz
Distortion	Less than 1% at 1 kHz

Headphones MDR-IF310

Power source	DC 3 V, 2 × R6 (size AA) battery
Weight	Approx. 170 g (6.0 oz.) incl. batteries

Design and specifications subject to change
without notice.

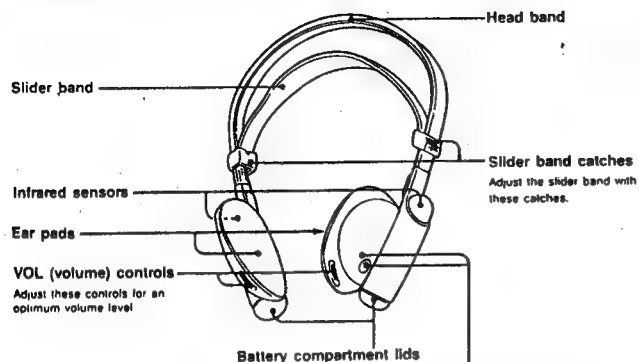
CORDLESS STEREO HEADPHONES

SECTION 1 GENERAL

This section is extracted from instruction manual.

Parts Identification

Headphones



POWER switch and indicator

Press the POWER switch. The indicator lights up. To turn off the power, press it again. When approximately 3 hours have elapsed without the unit being used, the POWER switch will be turned off automatically to avoid unnecessary battery wear.

Power Source of the Headphones

Use two R6 (size AA) batteries for the headphones. Be sure to use the same type of batteries for both right and left battery compartments.

When the batteries become weak
The POWER indicator dims, and a hissing noise increases. In such a case, replace both batteries.

The approximate battery life for continuous operation is as follows:

Sony alkaline battery AM3(N)	120 hours
Sony battery SUM-3(NS)	60 hours

Battery Installation

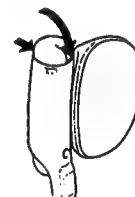
- 1 Open both battery compartments' lids.



- 2 Insert the batteries with the correct polarity.



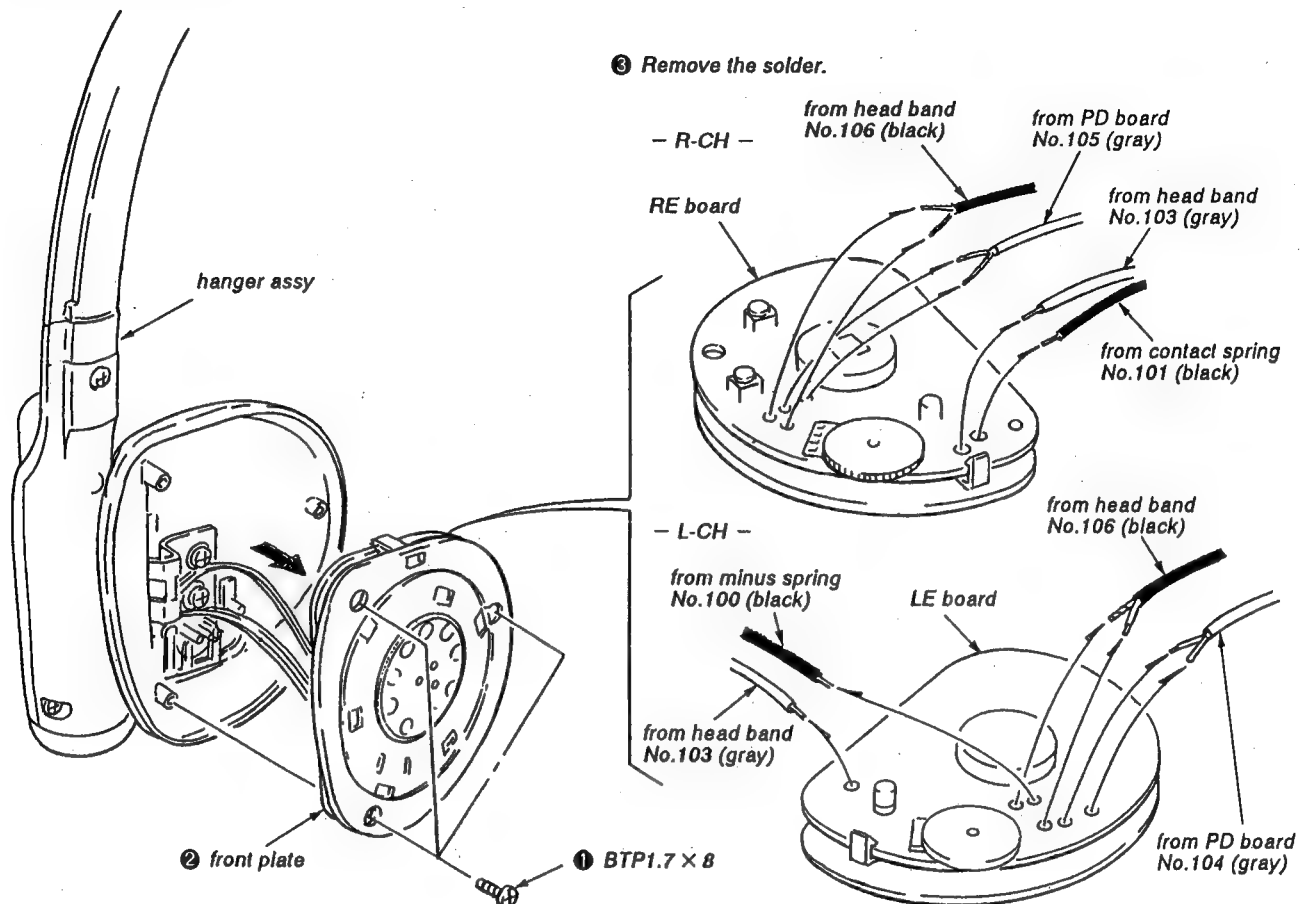
- 3 Close the battery compartments' lids.



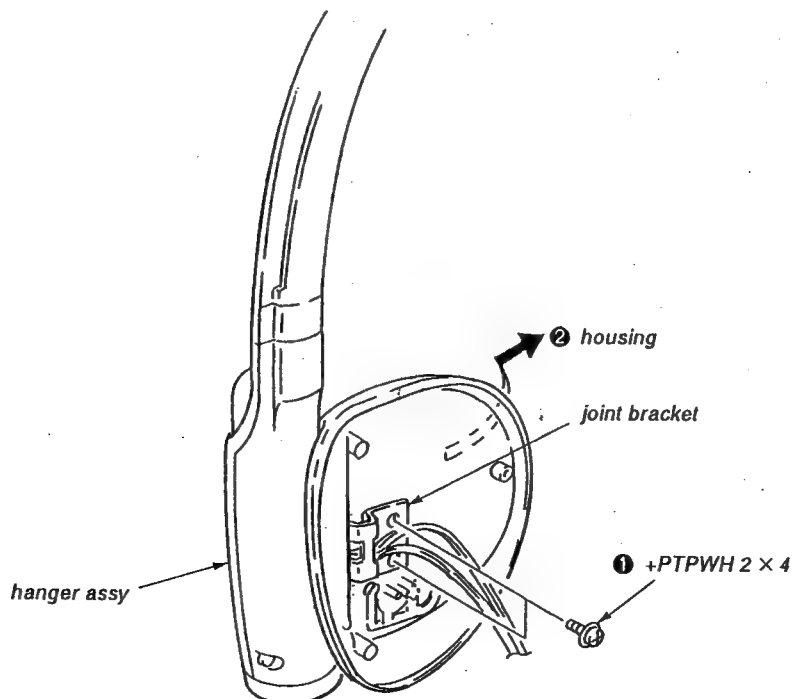
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

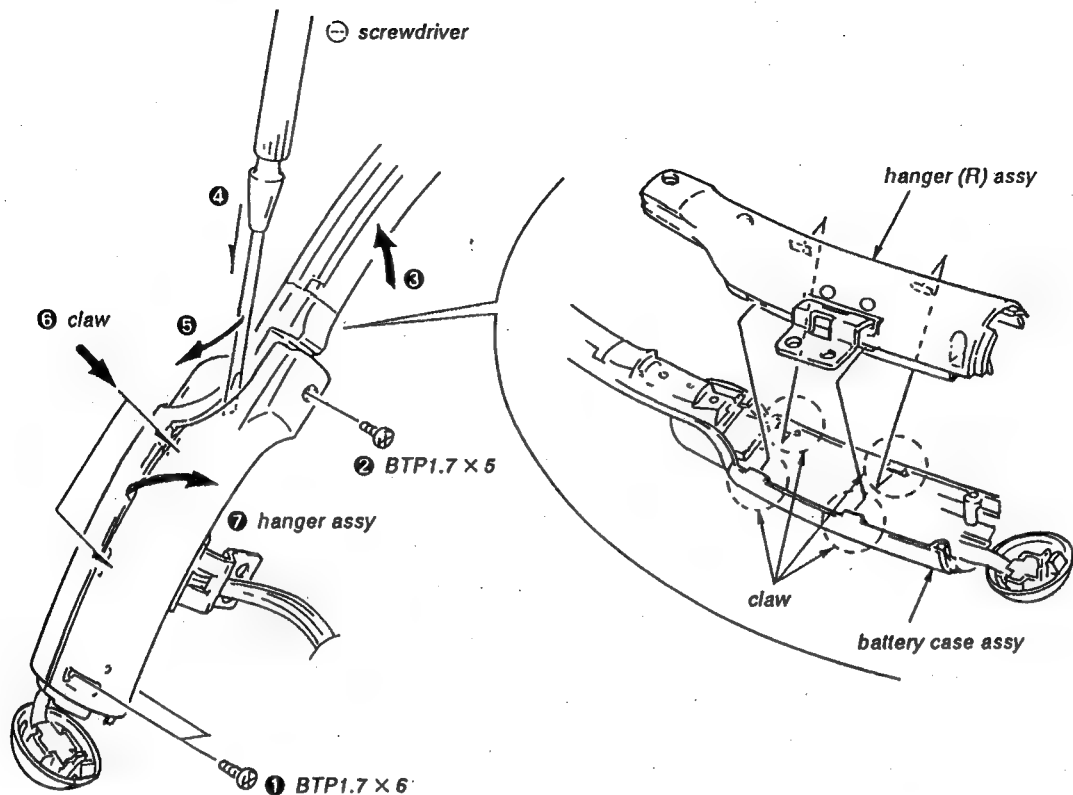
FRONT PLATE



HOUSING

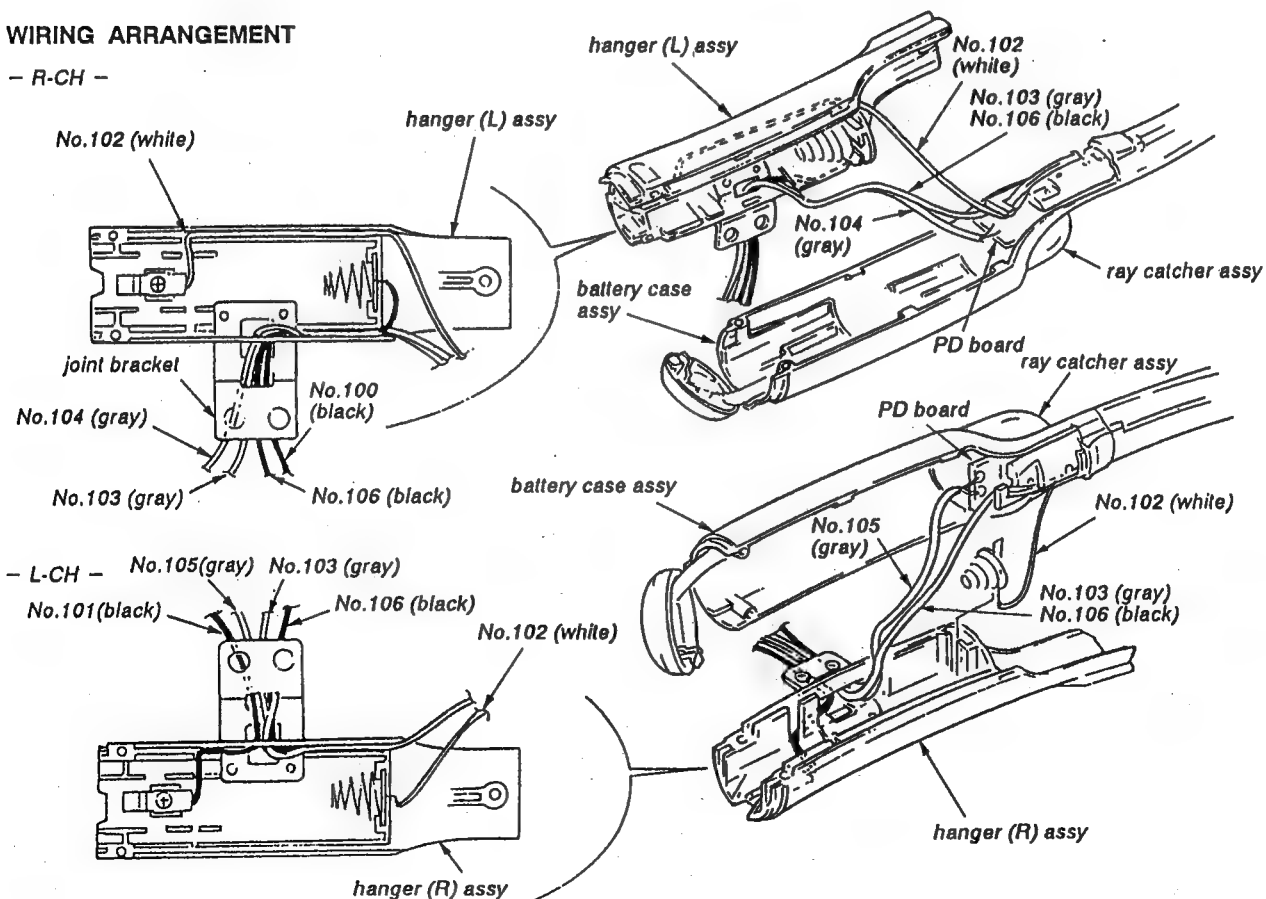


HANGER



WIRING ARRANGEMENT

- R-CH -



SECTION 3
ADJUSTMENTS

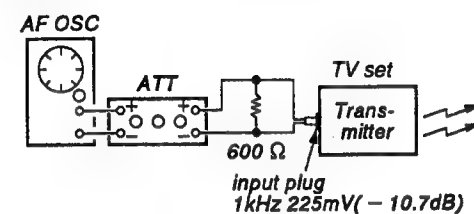
Note:

1. On adjusting, use the transmitter TV set.
2. L-ch adjustment should be completed before performing R-ch adjustment.

$$0 \text{ dB} = 0.775 \text{ V}$$

[Receiving Frequency Adjustment]

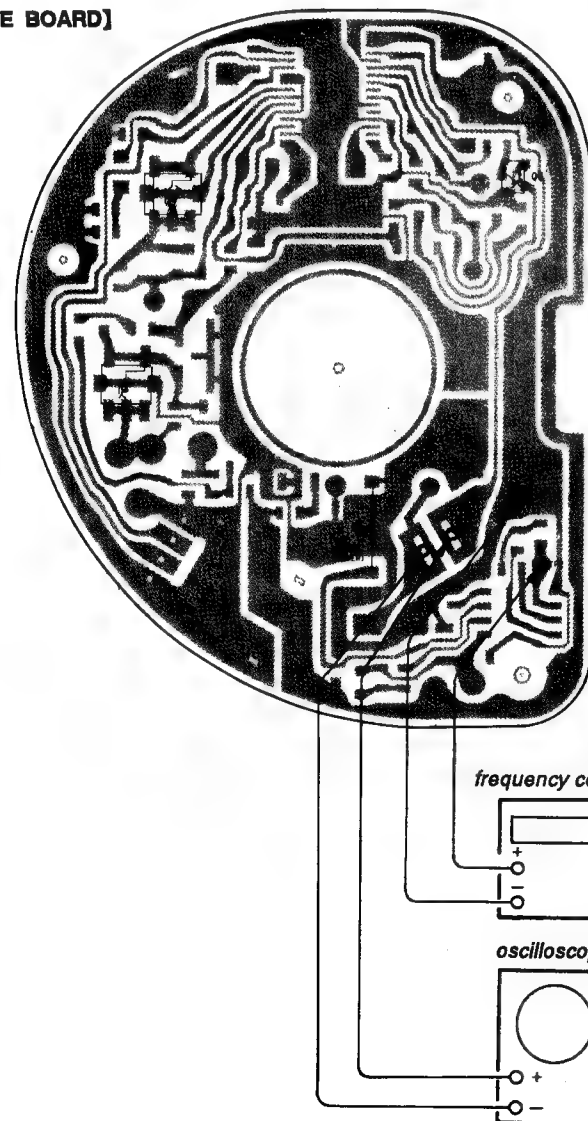
Preparation:



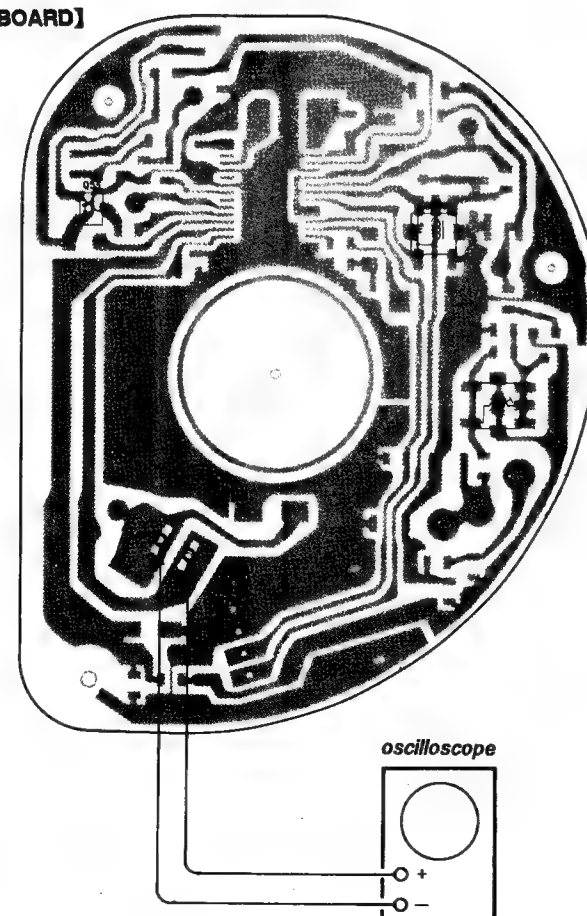
1. Feed a signal to TV set and connect a power supply.
2. Volume control: Optional position.
3. Short-circuit: Q3 (Q53) Base - Emitter (Ground)

[Connection and Adjustment Location]

[RE BOARD]



[LE BOARD]



Procedure:

1. Connect an oscilloscope to SP1 or SP51.
2. Turn on the power switch on the headphones.
3. Adjust to make minute input level with changing the direction of the emitting position of jig so that the noise appears on the waveform.
4. Adjust with L5 (L-ch) or L55 (R-ch) to maximize the reading on the oscilloscope.
5. Adjust with L1 (L-ch) or L51 (R-ch) to maximize the reading on the oscilloscope.
6. Release the short-circuit position.
Q3 (Q53) Base - Emitter (Ground)

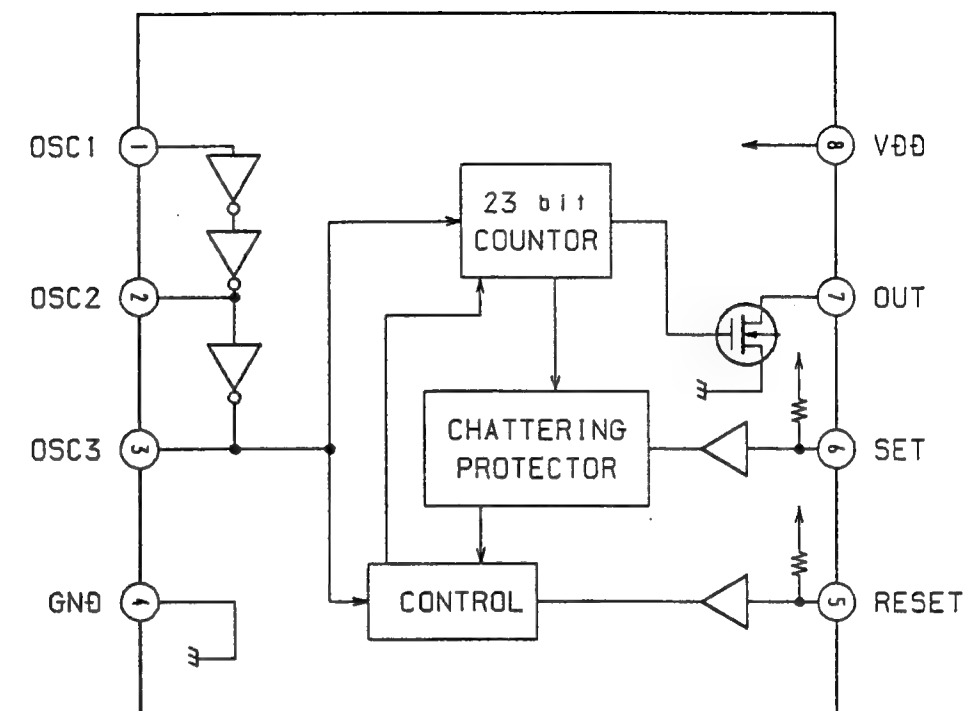
[Timer Clock Frequency Check]

1. Connect a frequency counter to TP2 and TP (GND).
2. Check the reading on the frequency counter becomes to the checking value.
Checking value: 300 Hz - 390 Hz.

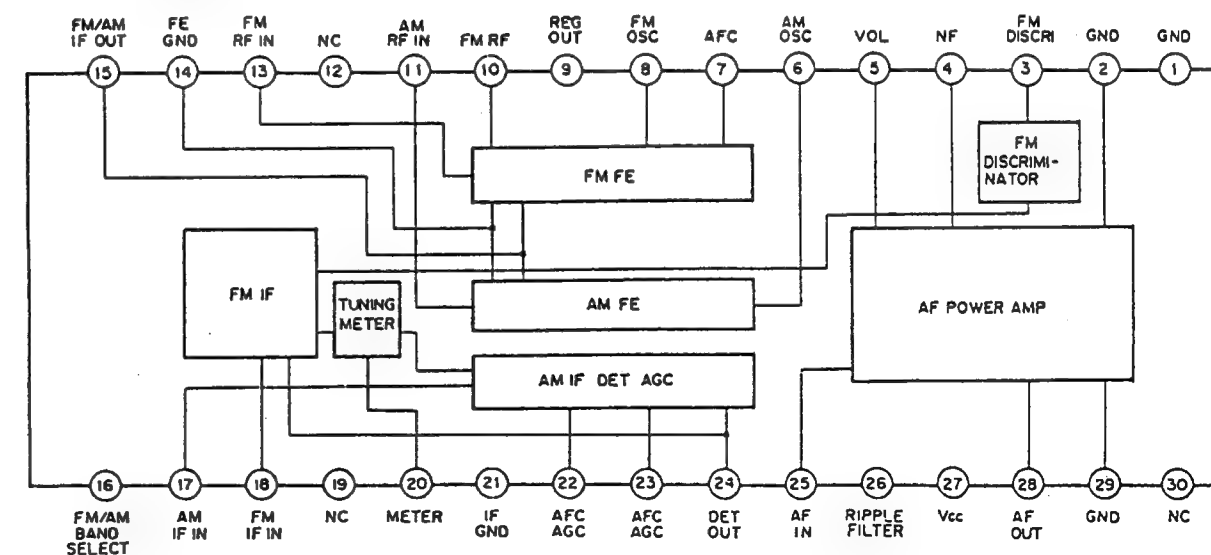
SECTION 4
DIAGRAMS

• IC Block Diagrams

IC2 BU2305F



IC21, 51 CXA1280N



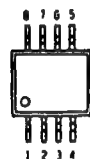
4-1. PRINTED WIRING BOARDS

• Semiconductor Location

Ref. No.	Location
D1	G-3
D2	E-2
D52	D-12
IC1	C-4
IC2	H-5
IC51	D-10
PH101	A-5, A-8
PH102	A-6, A-9
Q2	H-4
Q3	D-5
Q4	D-4
Q5	D-5
Q51	E-13
Q53	D-9
Q54	C-9
Q55	D-9

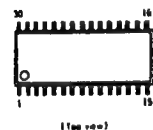
• Semiconductor Lead Layout

BU2305F



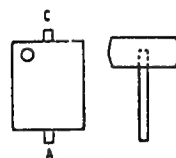
(TOP VIEW)

CXA1280N

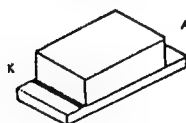


(TOP VIEW)

PP801-1

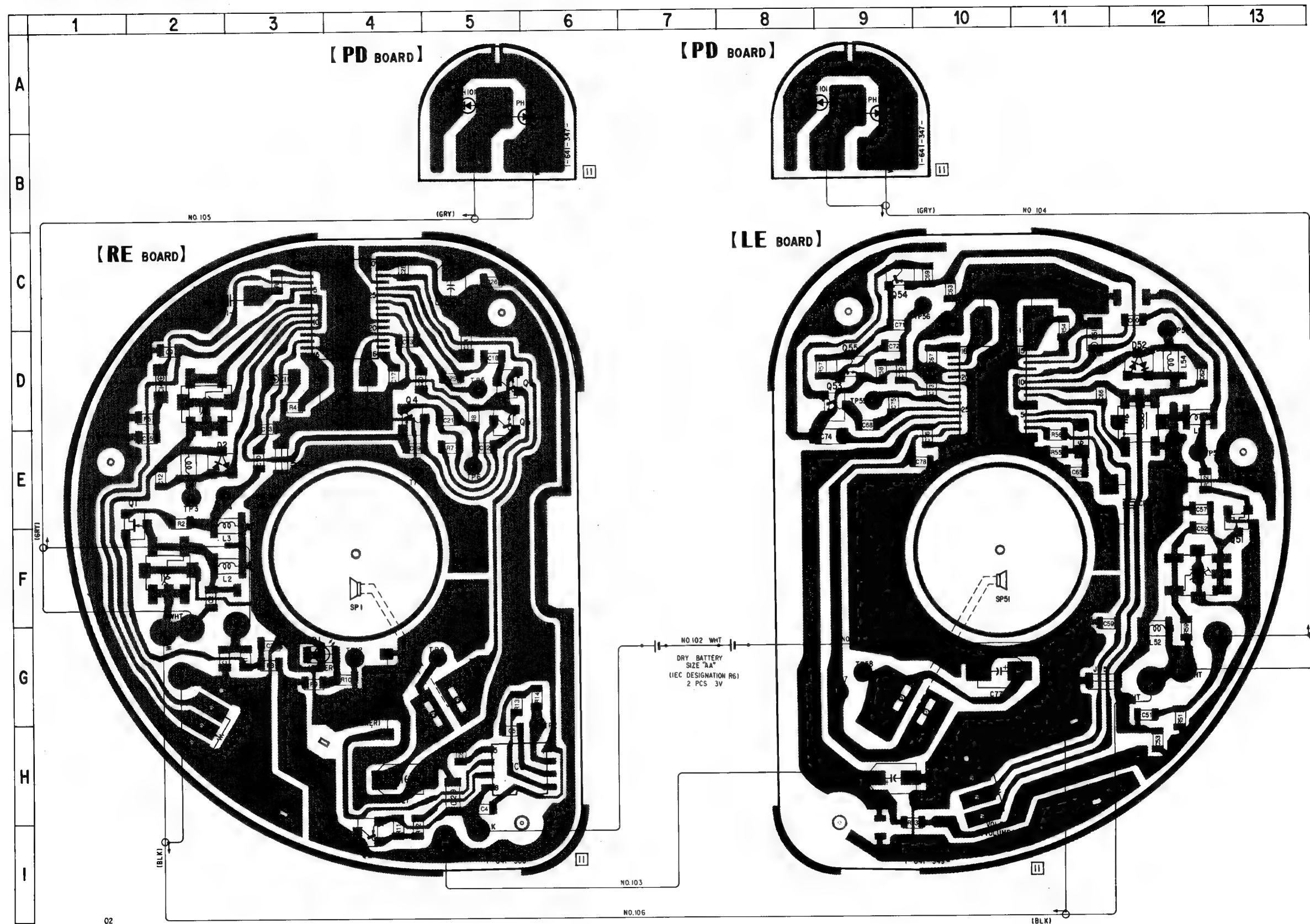


CL-150R-CD

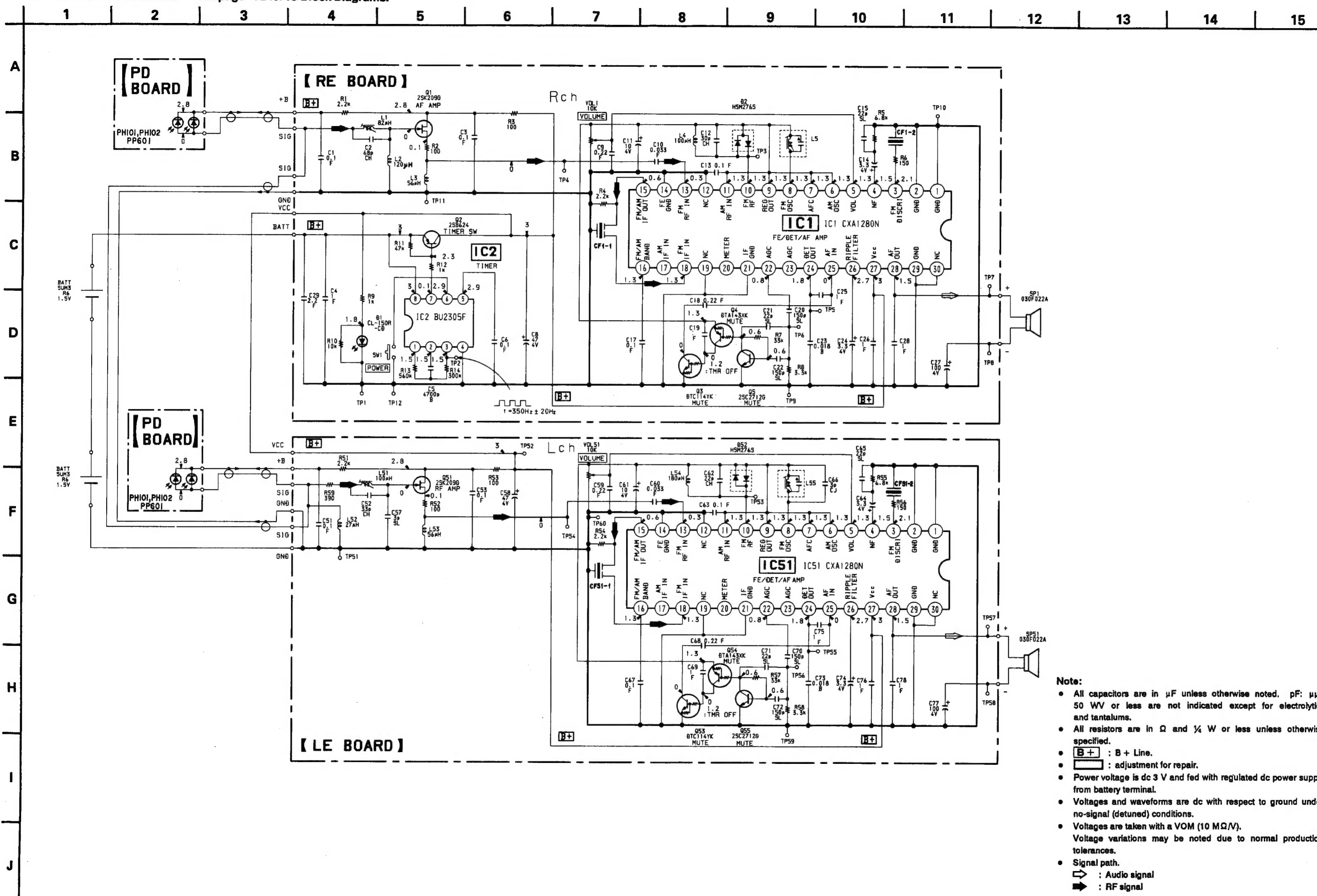


Note:

- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.



4-2. SCHEMATIC DIAGRAM • See page 172 for IC Block Diagrams.



SECTION 5

EXPLODED VIEW

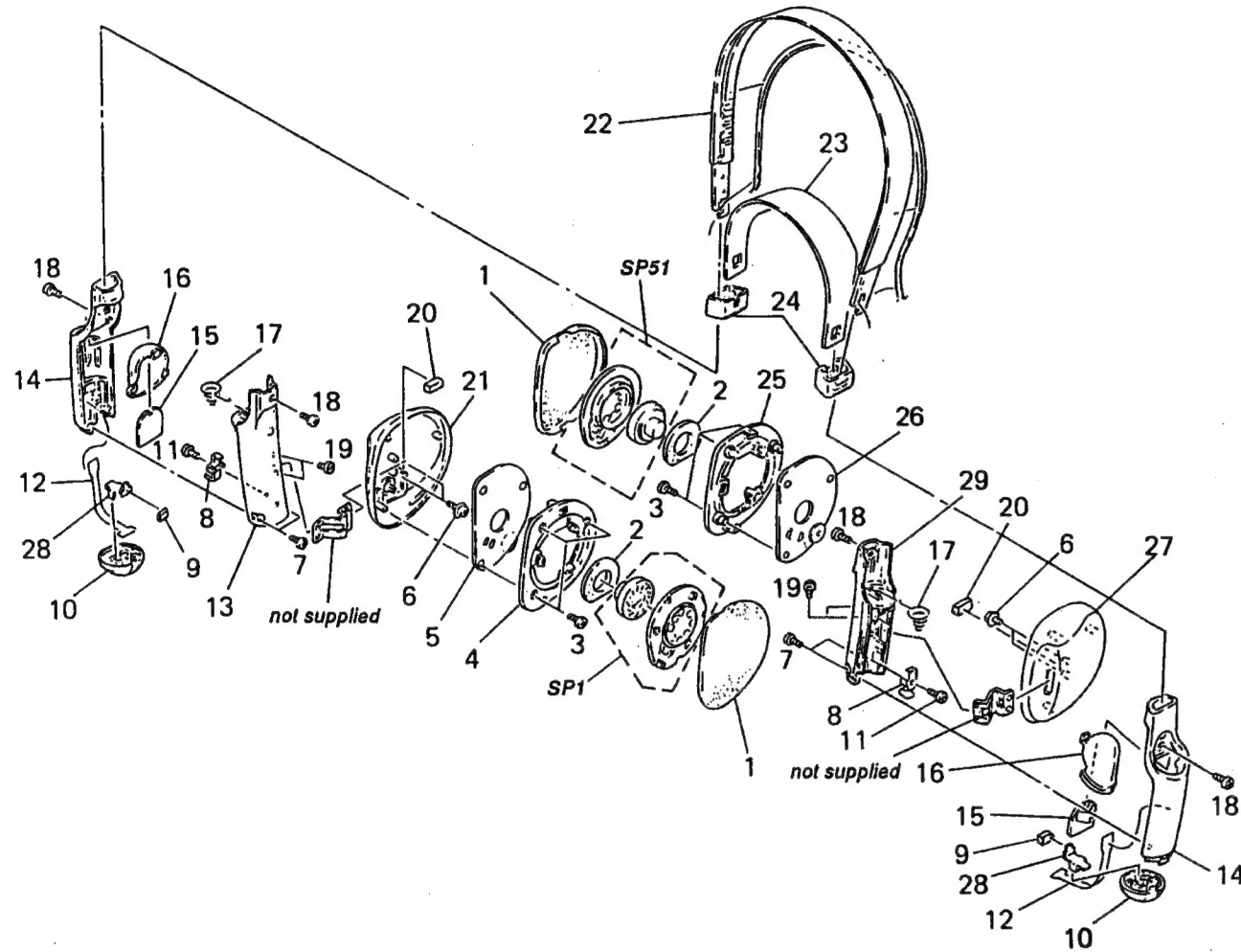
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

↑
Parts Color

↑
Cabinet's Color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	4-947-791-01	PAD, EAR		16	4-947-790-01	COVER, RAY CATCHER	
* 2	4-948-895-01	DAMPER		17	4-947-794-01	SPRING, MINUS	
3	3-318-203-31	SCREW (B1.7X8), TAPPING		18	3-318-203-11	SCREW (B1.7X6), TAPPING	
* 4	4-947-813-01	PLATE (R), FRONT		19	7-627-852-28	SCREW +P 1.7X3	
* 5	A-4542-062-A	RE BOARD, COMPLETE		20	4-947-796-01	CUSHION	
6	3-313-392-01	SCREW (2X4), + PTPWH		21	X-4941-959-1	HOUSING (R) ASSY	
7	3-318-203-11	SCREW (B1.7X6), TAPPING		* 22	4-947-809-01	BAND, HEAD	
8	4-947-795-01	SPRING, CONTACT		* 23	4-947-798-01	BAND, SLIDER	
9	9-911-838-XX	CUSHION		24	4-947-801-01	KNOB, SLIDER	
10	4-947-800-01	LID, BATTERY CASE		* 25	4-947-812-01	PLATE (L), FRONT	
11	7-627-552-07	SCREW (M1.7X2.5), TAPPING		* 26	A-4542-061-A	LE BOARD, COMPLETE	
12	4-947-789-01	SHEET		27	4-947-804-01	HOUSING (L)	
13	4-947-810-01	HANGER (R)		28	4-947-793-01	TERMINAL, PLUS	
14	4-947-808-01	CASE, BATTERY		29	4-947-811-01	HANGER (L)	
* 15	1-641-347-11	PC BOARD, PD		SP1	1-505-117-11	DRIVER UNIT (03F022A)	
				SP51	1-505-117-11	DRIVER UNIT (03F022A)	

SECTION 6

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, μ : for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H

When including parts by reference number, please include the board name.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-641-347-11	PD BOARD *****					
		<DIODE>					
PH101	8-719-975-20	PHOTO DIODE PP601-1		L51	1-424-333-11	COIL	
PH102	8-719-975-20	PHOTO DIODE PP601-1		L52	1-410-386-11	INDUCTOR CHIP 27UH	
				L53	1-410-390-11	INDUCTOR CHIP 56UH	
				L54	1-410-657-21	INDUCTOR CHIP 180UH	
				L55	1-406-436-11	COIL (OSC)	
						<TRANSISTOR>	
	*A-4542-061-A	LE BOARD, COMPLETE *****		Q51	8-729-220-93	TRANSISTOR 2SK209-G	
				Q53	8-729-900-52	TRANSISTOR DTC114YK	
				Q54	8-729-906-45	TRANSISTOR DTA143XK	
	1-578-717-71	FILTER, CRYSTAL		Q55	8-729-230-49	TRANSISTOR 2SC2712-YG	
		<CAPACITOR>				<RESISTOR>	
C51	1-163-038-00	CERAMIC CHIP 0.1MF		JW51	1-216-296-00	METAL GLAZE 0 5%	1/8W
C52	1-163-239-11	CERAMIC CHIP 33PF	5%	R51	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
C53	1-163-038-00	CERAMIC CHIP 0.1MF		R52	1-216-025-00	METAL GLAZE 100 5%	1/10W
C57	1-163-086-00	CERAMIC CHIP 3PF	0.25PF	R53	1-216-025-00	METAL GLAZE 100 5%	1/10W
C58	1-126-607-11	ELECT CHIP 47MF	20%	R54	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
C59	1-164-222-11	CERAMIC CHIP 0.22MF		R55	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
C60	1-163-034-00	CERAMIC CHIP 0.033MF		R56	1-216-029-00	METAL GLAZE 150 5%	1/10W
C61	1-135-201-11	TANTAL. CHIP 10MF	20%	R57	1-216-085-00	METAL GLAZE 33K 5%	1/10W
C62	1-163-235-11	CERAMIC CHIP 22PF	5%	R58	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
C63	1-163-038-00	CERAMIC CHIP 0.1MF		R59	1-216-039-00	METAL GLAZE 390 5%	1/10W
						<VARIABLE RESISTOR>	
C64	1-135-180-21	TANTAL. CHIP 3.3MF	20%	VOL51	1-238-906-11	RES, VAR, CARBON 10K	
C65	1-163-101-00	CERAMIC CHIP 22PF	5%				
C66	1-163-220-11	CERAMIC CHIP 3PF	0.25PF				
C67	1-163-038-00	CERAMIC CHIP 0.1MF					
C68	1-164-222-11	CERAMIC CHIP 0.22MF					
C69	1-164-346-11	CERAMIC CHIP 1MF			*A-4542-062-A	RE BOARD, COMPLETE *****	
C70	1-163-121-00	CERAMIC CHIP 150PF	5%				
C71	1-163-101-00	CERAMIC CHIP 22PF	5%		1-578-717-71	FILTER, CRYSTAL	
C72	1-163-121-00	CERAMIC CHIP 150PF	5%			<CAPACITOR>	
C73	1-163-024-00	CERAMIC CHIP 0.018MF	10%				
C74	1-135-180-21	TANTAL. CHIP 3.3MF	20%	C1	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C75	1-164-346-11	CERAMIC CHIP 1MF		C2	1-163-113-00	CERAMIC CHIP 68PF	5%
C76	1-164-346-11	CERAMIC CHIP 1MF		C3	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C77	1-126-209-11	ELECT CHIP 100MF	20%	C4	1-164-346-11	CERAMIC CHIP 1MF	16V
C78	1-164-346-11	CERAMIC CHIP 1MF		C5	1-163-017-00	CERAMIC CHIP 0.0047MF	10%
	<DIODE>			C6	1-163-038-00	CERAMIC CHIP 0.1MF	25V
D52	8-719-946-33	DIODE HSM276S		C8	1-126-607-11	ELECT CHIP 47MF	20%
				C9	1-164-222-11	CERAMIC CHIP 0.22MF	25V
	<IC>			C10	1-163-989-11	CERAMIC CHIP 0.033MF	10%
				C11	1-135-201-11	TANTAL. CHIP 10MF	20%
IC51	8-759-605-59	IC CXAI280N		C12	1-163-104-00	CERAMIC CHIP 30PF	5%
				C13	1-163-038-00	CERAMIC CHIP 0.1MF	25V
				C14	1-135-180-21	TANTAL. CHIP 3.3MF	20%
				C15	1-163-101-00	CERAMIC CHIP 22PF	5%

RE

REF.NO.	PART NO.	DESCRIPTION	REMARK
C17	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C18	1-164-222-11	CERAMIC CHIP 0.22MF	25V
C19	1-164-346-11	CERAMIC CHIP 1MF	16V
C20	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C21	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C22	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C23	1-163-024-00	CERAMIC CHIP 0.018MF	10% 50V
C24	1-135-180-21	TANTAL. CHIP 3.3MF	20% 4V
C25	1-164-346-11	CERAMIC CHIP 1MF	16V
C26	1-164-346-11	CERAMIC CHIP 1MF	16V
C27	1-126-209-11	ELECT CHIP 100MF	20% 4V
C28	1-164-346-11	CERAMIC CHIP 1MF	16V
C29	1-164-337-11	CERAMIC CHIP 2.2MF	16V

<DIODE>

D1	8-719-989-22	DIODE CL-150R-CD
D2	8-719-946-33	DIODE NSM276S

<IC>

IC1	8-759-605-59	IC CXA1280N
IC2	8-759-044-56	IC BU2305F

<COIL>

L1	1-424-334-11	COIL
L2	1-410-655-31	INDUCTOR CHIP 120UH
L3	1-410-390-11	INDUCTOR CHIP 56UH
L4	1-410-393-11	INDUCTOR CHIP 100UH
L5	1-406-436-11	COIL (OSC)

<TRANSISTOR>

Q1	8-729-220-93	TRANSISTOR 2SK209-G
Q2	8-729-141-48	TRANSISTOR 2SB624-BV345
Q3	8-729-900-52	TRANSISTOR DTC114YK
Q4	8-729-906-45	TRANSISTOR DTA143XK
Q5	8-729-230-49	TRANSISTOR 2SC2712-YG

<RESISTOR>

JW1	1-216-296-00	METAL GLAZE	0	5%	1/8W
R1	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R2	1-216-025-00	METAL GLAZE	100	5%	1/10W
R3	1-216-025-00	METAL GLAZE	100	5%	1/10W
R4	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R5	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R6	1-216-029-00	METAL GLAZE	150	5%	1/10W
R7	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R8	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R9	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R10	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R11	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R12	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R13	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R14	1-216-108-00	METAL GLAZE	300K	5%	1/10W

<SWITCH>

SW1	1-572-473-11	SWITCH, TACTIL
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<VARIABLE RESISTOR>

VOL1	1-238-906-11	RES, VAR, CARBON 10K
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